

# Middlesex University Research Repository

An open access repository of

Middlesex University research

<http://eprints.mdx.ac.uk>

Zheng, Wenwei (2020) A study of university teacher–student relationships from the perspective of trust: a Socratic and Confucian comparison. PhD thesis, Middlesex University. [Thesis]

Final accepted version (with author's formatting)

This version is available at: <https://eprints.mdx.ac.uk/33697/>

## Copyright:

Middlesex University Research Repository makes the University's research available electronically.

Copyright and moral rights to this work are retained by the author and/or other copyright owners unless otherwise stated. The work is supplied on the understanding that any use for commercial gain is strictly forbidden. A copy may be downloaded for personal, non-commercial, research or study without prior permission and without charge.

Works, including theses and research projects, may not be reproduced in any format or medium, or extensive quotations taken from them, or their content changed in any way, without first obtaining permission in writing from the copyright holder(s). They may not be sold or exploited commercially in any format or medium without the prior written permission of the copyright holder(s).

Full bibliographic details must be given when referring to, or quoting from full items including the author's name, the title of the work, publication details where relevant (place, publisher, date), pagination, and for theses or dissertations the awarding institution, the degree type awarded, and the date of the award.

If you believe that any material held in the repository infringes copyright law, please contact the Repository Team at Middlesex University via the following email address:

[eprints@mdx.ac.uk](mailto:eprints@mdx.ac.uk)

The item will be removed from the repository while any claim is being investigated.

See also repository copyright: re-use policy: <http://eprints.mdx.ac.uk/policies.html#copy>

**A Study of University Teacher–Student Relationships from the Perspective of  
Trust:**

**A Socratic and Confucian Comparison**

Zheng Wanwei

Student Number: M00519323

A thesis submitted to Middlesex University in partial fulfilment of requirements for the  
degree of PhD

School of Health and Education

Submission Date: 12/07/2019

## Contents

Contents.....	i
Abstract .....	v
1. Introduction .....	1
1.1 Background to the research .....	1
1.2 Research problem and hypotheses.....	2
1.3 Justification for the research.....	3
1.4 Methodology.....	4
1.4.1 Methodologies and research design.....	4
1.5 Notions of trust.....	5
1.6 Limitations of scope and key assumptions .....	7
1.6.1 Trust and higher education .....	7
1.6.1.1 Higher education and the role of higher education.....	7
1.6.1.2 Higher education in promoting social and cultural construction .....	8
1.6.1.3 Trust in the relationship between teachers and students in higher education .....	8
1.6.2. Different views on trust in higher education in the Eastern and Western world .....	9
1.6.2.1 Chinese philosophy on trust in teacher–student relationship.....	9
1.6.2.1.1 Confucius’ interpretation of trust in the teacher–student relationship .....	9
1.6.2.1.2 The influence of ‘the absolute authority of the teacher’ on trust in the teacher– student relationship .....	10
1.6.2.1.3 The decline of ‘absolute authority of teachers’ on trust in the teacher–student relationship .....	11
1.6.2.2 Western philosophy on trust in the teacher–student relationship.....	12
1.6.2.2.1 The influence of traditional teacher-oriented philosophy on trust in the teacher– student relationship .....	12
1.6.2.2.2 The influence of modern student-oriented philosophy on trust in the teacher–student relationship .....	13
1.6.3 Operationalizations of Schools of thoughts in Eastern and Western education systems...	14
1.6.3.1 Limitations on the approach .....	14
1.7 Summary .....	15
2 Literature Review .....	16
2.1 Introduction .....	16
2.2. Basic understanding of trust: definitions and dimensions.....	17
2.2.1 Definitions of trust .....	17
2.2.1.1 Trust as personal expectations.....	17
2.2.1.2 Trust as interpersonal relations.....	17
2.2.1.3 Trust as social mechanisms .....	18
2.2.2 Dimension of trust .....	19
2.2.2.1 Integrity.....	19
2.2.2.2 Competence .....	20
2.2.2.3 Benevolence.....	20
2.3 Trust in Western and Eastern Cultural Contexts .....	21
2.3.1 Trust in Western cultural context.....	21
2.3.2 Comparing trust across cultural context .....	22
2.4.1 Levels and types of trust in Western higher education .....	23
2.4.1.1 Importance of trust in higher education.....	23
2.4.1.2 Student trust in colleges .....	23

2.4.1.3 Faculty's trust in administrators, colleagues and students.....	24
2.4.1.4 Trust in mentoring.....	26
2.4.1.5 Trust in friendship among students .....	26
2.4.1.6 Trust related to inter-organizational and multi-agency partnerships .....	27
2.4.2 Strategies to improve trust in higher education .....	27
2.5 Trust in different cultural background .....	27
2.5.1 Trust in Eastern education systems.....	28
2.5.1.1 Trust and Confucianism.....	28
2.5.1.2 Confucianism and trust in higher education of Asia .....	28
2.5.1.3 Confucianism and trust in higher education in China .....	30
2.5.1.4 Summary of trust and Confucian education .....	31
2.5.2 Socrates in Western education philosophy.....	32
2.5.2.1 The power of questioning.....	32
2.5.2.2 The value of self-generated knowledge .....	32
2.5.2.3 How Socrates valued trust .....	33
2.5.2.4 Western higher education and trust in different countries .....	34
2.6 Conclusion .....	38
3 Methodology.....	40
3.1 Justification for the paradigm and methodology.....	40
3.1.1 Comparative study .....	40
3.2 Research design .....	42
3.2.1 Research design rationale .....	42
3.2.1.1 Questionnaire design rationale.....	42
3.2.1.1.1 Student questionnaire .....	43
3.2.1.1.2 Teacher questionnaire.....	47
3.3. Interview design rationale .....	47
3.4 Summary .....	48
4. Results .....	49
4.1 Analyses of student questionnaire and interviews.....	49
4.1.1 Preprocessing of questionnaire Part A.....	49
Students' attitude to the importance of the teacher–student relationship .....	50
Students' attitude to the importance of teachers' expertise .....	50
Students' attitude to the equality/authority of teachers .....	51
Students' expected closeness of their relationships with teachers.....	52
Students' preference about class atmosphere .....	53
Students' trust in teachers in interpersonal relationships:.....	53
4.1.2 Impacts of culture and year of attendance on trust (Part A).....	57
4.1.2.1 Effects of culture and year of attendance on importance of relationship .....	58
4.1.2.2 Effects of culture and the year of attendance on equality/authority .....	59
4.1.2.3 Effects of culture and year of attendance on expertise .....	61
4.1.2.4 Effects of culture and year of attendance on classroom atmosphere .....	62
4.1.2.5 Effects of culture and year of attendance on trust .....	63
4.1.2.6 Effects of culture and year of attendance on closeness .....	64
4.1.3 Impacts of culture and the year of attendance on trust (Part B).....	65
4.1.3.1 Effects of culture and the year of attendance on the importance of teachers' intelligence .....	66
4.1.3.2 Effects of culture and year of attendance on importance of teachers' expertise .....	67

4.1.3.3 Effects of culture and the year of attendance on the importance of teachers' moral standard .....	67
4.1.3.4 Effects of culture and year of attendance on importance of teachers' authority .....	68
4.1.3.5 Effects of culture and the year of attendance on importance of teachers' class discipline .....	69
4.1.3.6 Effects of culture and the year of attendance on importance of class workload .....	70
4.1.3.7 Effects of culture and the year of attendance on the importance of teaching style .....	71
4.1.4 Factors contributing to students' trust in teachers.....	72
4.1.4.1 Relative importance of contributing factors (Part A) .....	73
4.1.4.1.1 Relative importance of contributing factors in first-year HK students.....	75
4.1.4.1.2 Relative importance of contributing factors in final-year HK students.....	76
4.1.4.1.3 Relative importance of contributing factors in UK first-year students.....	77
4.1.4.1.4 Relative importance of contributing factors in UK final-year students.....	78
4.1.4.2 Relative importance of contributing factors (Part B) .....	79
4.1.4.3 Factor selection with backward elimination .....	83
4.1.5 TOWARDS A DYNAMIC AND UNIFIED MODEL .....	85
4.1.5.1 The importance-mediated versus closeness-mediated model.....	86
4.1.5.2 The moderation effect of culture.....	90
4.1.6 QUALITATIVE ANALYSIS ON INTERVIEWS WITH STUDENTS .....	92
4.1.6.1 Theme 1: Caring .....	93
Interpersonal dimension .....	94
Functional dimension.....	94
Functional dimension.....	94
Interpersonal dimension .....	94
4.1.6.2 Theme 2: Pleasant experience .....	95
4.1.6.3 Theme 3: Class activeness.....	96
4.1.6.4 Theme 4: Initiation.....	98
4.1.6.5 Theme 5: Favourite characteristics .....	99
4.1.6.6 Theme 6: Important factors in relationship .....	101
4.1.6.7 Conclusion.....	102
<b>4.2 ANALYSIS OF TEACHER QUESTIONNAIRE AND INTERVIEWS .....</b>	<b>103</b>
4.2.1 QUANTITATIVE ANALYSIS.....	103
4.2.1.1 Descriptive statistics for HK teachers.....	104
4.2.1.2 Descriptive statistics for UK teachers.....	105
4.2.1.3 Cultural difference in general.....	106
4.2.1.4 Cultural difference in attention to academics.....	106
4.2.1.5 Cultural difference in outgoingness .....	107
4.2.1.6 Cultural difference in politeness .....	108
4.2.1.7 Cultural difference in advice-seeking.....	108
4.2.1.8 Cultural difference in confrontation of authority .....	109
4.2.1.9 Cultural difference in closeness .....	110
4.2.1.10 Cultural difference in critical thinking .....	111
4.2.1.11 Cultural difference in primary role.....	112
4.2.2 QUALITATIVE ANALYSIS ON INTERVIEWS WITH TEACHERS .....	113
4.2.2.1 Theme 1: Teachers' function vs. interpersonal relationships .....	114
4.2.2.2 Theme 2: Teachers' priority .....	117
4.2.2.3 Theme 3: Hierarchy between teachers and students .....	118
4.2.2.4 Theme 4: Teachers' trust in students.....	119

4.2.2.5 Conclusion.....	119
<b>5. DISCUSSION .....</b>	<b>120</b>
<b>5.1 SUMMARY OF THE RESULTS.....</b>	<b>120</b>
5.1.1 SUMMARY OF THE RESULTS OF THE STUDENT QUESTIONNAIRE AND INTERVIEWS .....	121
5.1.1.1 Dimensions of the student questionnaire .....	121
5.1.1.2 Correlational analyses between authority, importance, class atmosphere, closeness, expertise and trust .....	124
5.1.1.3 Impacts of culture and year of attendance on trust (Part A) .....	126
5.1.1.4 Impacts of culture and year of attendance on trust (Part B) .....	128
5.1.1.5 Factors contributing to students' trust in teachers.....	130
5.1.1.6 A unified model using structural equation modelling .....	132
5.1.1.7 Qualitative analyses on the interviews with students .....	134
5.1.2 SUMMARY OF RESULTS OF TEACHER QUESTIONNAIRE AND INTERVIEWS.....	135
5.1.2.1 Quantitative analyses on teachers' questionnaires .....	136
5.1.2.2 Qualitative analyses on teachers' interviews.....	137
<b>5.2 THEORETICAL IMPLICATIONS AND CONTRIBUTIONS .....</b>	<b>138</b>
5.2.1 REVIEWS ON PREVIOUS FINDINGS .....	139
5.2.1.1 Literature on teacher–student trust in Eastern culture .....	139
5.2.1.2 Previous findings on teacher–student trust in Western culture.....	142
5.2.2 THE PRESENT STUDY UNDER THE FRAMEWORK OF PREVIOUS FINDINGS.....	144
5.2.2.1 The six dimensions identified in Part A of the student questionnaire.....	144
5.2.2.2 The seven qualities of good students in the eyes of teachers .....	149
<b>6. CONCLUSION .....</b>	<b>153</b>
<b>6.1 OVERVIEW OF CONTRIBUTIONS OF THE CURRENT STUDY .....</b>	<b>153</b>
6.1.1 HOW CONTRIBUTING FACTORS AFFECT TRUST .....	153
6.1.2 CULTURAL DIFFERENCES IN STUDENTS' TRUST IN TEACHERS.....	155
<b>6.2 IMPLICATIONS OF THE VALUES ABOUT TEACHER–STUDENT TRUST IN PRACTICE .....</b>	<b>157</b>
6.2.1 EQUALITY VERSUS AUTHORITY .....	157
6.2.2 AUTONOMY VERSUS CARING .....	159
6.2.3 CLASS ATMOSPHERE .....	160
<b>APPENDIX A .....</b>	<b>162</b>
<b>CONFUCIANISM IN EASTERN EDUCATION PHILOSOPHY .....</b>	<b>162</b>
<b>APPENDIX B .....</b>	<b>163</b>
<b>KEY FEATURES OF CONFUCIAN-ORIENTED EDUCATION IN EAST ASIA .....</b>	<b>163</b>
<b>APPENDIX C .....</b>	<b>165</b>
<b>LIST OF 27 QUESTIONS .....</b>	<b>165</b>
<b>REFERENCES.....</b>	<b>169</b>

## **Abstract**

Confucian and Socratic schools of thought are famously noted as the foundations of Eastern and Western education systems. Confucianism emphasizes the importance of discipline and teacher's authority; Socratic methods of teaching highly values critical thinking and the power of questioning. Confucian and Socratic schools of thought have been profoundly influencing the education systems in the Eastern and Western societies, fostering distinctive cultures and values in teaching and learning. Trust has been considered one of the most important determinants of teacher-student relationships and the efficacy of education systems. Past literature has highlighted key factors influencing trust in the teacher-student relationship in both Eastern and Western cultures. Yet more literature on trust in teacher-student relationships has a Eurocentric focus sampled from schools in Western education systems, overlooking the influence of Confucian school of thoughts and empirical data in Eastern education systems. To date, literature has neither discussed the importance of trust in both Eastern and Western education systems subscribed to Confucian and Socratic schools of thought perspectives, nor employed empirical data from higher education to compare and contrast the trust relationships in Eastern and Western education systems. This dissertation will discuss the trust relationship between teachers and students in higher education in two universities located in UK and Hong Kong, which will be indicative of Confucian and Socratic schools of thoughts in Eastern and Western education systems respectively. The first objective is to discuss the different bases of trust in Eastern and Western education systems, coupled with the influence of trust on the teacher-student relationship. Secondly, from the perspective of trust between teachers and students, this dissertation aims to explore existing trust problems in the teacher-student relationship in both Eastern and Western educational contexts. Finally, based on teacher and student trust theory, this dissertation will propose methods and counter-measures to promote a teacher-student relationship that achieves positive interaction in higher education. This dissertation discusses in depth how Confucian and Socratic schools of thoughts influence the value of trust between teachers and student in both Eastern and Western education systems, and uses empirical data to compare and contrast the determinants of trust in teacher-student relationships in the two education systems from the perspectives of both parties. Based the findings, the researcher proposes practical strategies for teachers in higher education systems, who are the potential audience of this dissertation, to establish and maintain trust in their relationships with students.

Key words: trust, higher education, Eastern/Confucian culture, Western/Socratic culture teacher-student relationships

## **1. Introduction**

### **1.1 Background to the research**

The relationship between teachers and students has been a focus of higher education all over the world (Eifler & Veltri, 2010; Watling, Driessen, van der Vleuten & Lingard, 2014). There have been rapid changes in political and economical systems (Mukhopadhyay & Smith, 2010), and education in China, too, experiences constant modification and refinement. Due to globalization and the growth of information technology, China has been exposed to the distinctive values of other cultures. The teacher–student relationship, especially, is facing serious challenges. Aside from political, economic, historical and other problems directly affecting the educational system, cultural influence may be the most important factor, posing continuous resistance to establishing an ideal teacher–student relationship.

China was a feudal society for more than two thousand years, and Confucianism became a significant cultural influence. Confucius and his disciples had an ideal teacher–student relationship with mutual respect, proximity and a liberal academic atmosphere, and there was a high level of trust between teacher and student because of their clearly defined roles. The most well-known followers of Confucius – Mencius, Xunzi and Dong Zhongshu – established rules to value his absolute authority and supreme privilege. Confucius highly valued the respect from his students but overlooked the trust relationship between him and his students, since the roles of student and teacher were so clearly defined (Confucius, 1979; Mencius, 2009; Xunzi, 2009). Thus, for thousands of years, the trust relationship between student and teacher has rarely been mentioned, if at all, under the prerequisite of obedience: the proper manner of showing respect (Confucius, 1979).

Teachers in China who subscribe to a Confucian view of teachers' authority have rationalized students' misbehaviour as a lack of restraint. There are further consequential characteristics in China's education system due to the clash of Eastern and Western cultures, such as the hierarchical and confrontational relationship between teachers and students (Xu, 2013), which forces teachers to mentor students in obedience (Grenier, 2011; Titus & Ballou, 2014; Zamani & Erfanirad, 2011), leading to a lack of autonomy on



students' part, thus affecting the development of their academic career in various ways, for instance as they lack creativity and motivation to learn, creating dependency (Blonder et al., 2013; Kilinc, 2014; Morrison, Cegielski & Rainer, 2012; Smart et al., 2012) and eventually leading to a lower level of interpersonal trust between teachers and students.

The core values of Confucian education theory are evidently different from those of Western education theory. Chinese students of newer generations are more open to Western-centred elements, such as individual value and equality in teacher–student relationships. Although they respect their teachers, they are more resistant than previous generations to the established Confucian notion of being in obedience in teacher–student relationships (Galton, 1977). In fact, debate about effective and healthy teacher–student relationships is an ongoing process in both Eastern and Western cultures; trust between teachers and students is perceived as an important element to measure the quality of such relationships (Chen & Liu, 2013; Fryberg & Markus, 2007; Mott, Shellhaas & Joshi, 2013).

Trust between teachers and students is essential for student engagement (Gibbs, 2004). The notion of trust has been studied by multiple methodological traditions, such as psychology, sociology and philosophy. Trust is defined as an individual psychology and behaviour that is closely shaped by personal perspectives of value and philosophy (e.g. Lindstrom, 2011; Zhang & Bond, 1993), as well as a social phenomenon that helps to establish cohesion among the parties in society, to bind them (Searle, 1995). Thus, trust, as a social phenomenon, is closely tied to the society and the cultural background in which it developed (Peng, 2000).

## **1.2 Research problem and hypotheses**

Chinese and Western education systems have inherited theories and ideas developed from different cultural backgrounds. In order to compare and contrast the two types of current education system, the study aims to investigate the quality of teacher–student relationships in Western and Chinese higher education department settings. A critical component of teacher–student, trust, is established and manifested differently in the two distinctive cultures, Western and Eastern. This study explores how students and teachers

in the two distinctive cultural backgrounds exercise trust and, more importantly, looks into the foundation of trust to provide insight to help future research on Eastern/Western culture and education.

A comprehensive understanding of trust will effectively reduce potential conflict between teachers and students in both Eastern and Western cultures, which further helps both parties to understand each other. In order to introduce the views of Western and Eastern theoretical orientation on trust, a comprehensive literature review regarding the essential discrepancies between the ancient philosophies is conducted in the following section. The comparison of trust in the philosophies will be presented to serve as the framework to design the measures to carry out analysis of education systems in Western and Eastern cultures. In this dissertation, the researcher used questionnaires and interviewed both students and teachers in Western and Eastern education systems. The questionnaire contains items to measure values on the perspective of trust. Based on the quantitative and qualitative analysis of the results, a better picture is obtained of how the two theoretical orientations affect the teacher–student relationship, as well as students’ well-being and academic achievement.

### **1.3 Justification for the research**

This dissertation starts with an exploration of different perspectives of trust, comparing the role that institutional trust plays and the position that it holds in a variety of higher education settings to reimagine an ideal relationship between teachers and students. Trust is not unidirectional but reciprocal between teachers and students. Trust in teacher–student relationships enables students to see themselves in relation to their teachers, and teachers will benefit from it, too (Confucius, 1979). Yet, to date, no research has compared and contrasted trust in teacher–student relationships in Eastern and Western education systems.

## **1.4 Methodology**

### **1.4.1 Methodologies and research design**

In order to investigate through the lens of trust the teacher–student relationship in education settings with contrasting theoretical orientations, mixed methods were used in this study.

In the quantitative research, initially 20 higher education students in Hong Kong participated in a pilot study, and in a following round further students from the first and final year of universities in Hong Kong and the United Kingdom participated. Universities in Hong Kong and the United Kingdom were selected because they represent education with Confucian and Socratic influence, respectively. The questionnaires were bilingual, in Cantonese and English, which helped to ensure that there was no misunderstanding due to a language barrier. A briefing was conducted before participants filled out the questionnaires, with literature on the notion of trust, to help participants to understand and answer the questions. The questions investigated how students perceive trust in educational settings by asking multiple closed-ended questions (e.g. ‘I care very much about the interpersonal relationship between me and my teachers’), requesting students to rank the factors that they believe are important to the trust relationship, and collecting the rituals and terms that students use to describe their relationship with their teachers. The student unions agreed to ask students to complete the pilot questionnaires and collect the questionnaire responses. Then, the questionnaires were adjusted for use in the main research undertaking. The final revised version was distributed and collected in hard copy format to students in both Hong Kong and the United Kingdom.

In the qualitative part, student perceptions of teacher–student trust were investigated through in-depth interviews of the first- and final-year students at the universities. This part was to discover the trust relationship of students and teachers within the institutions, how they trust their teacher and the language they use when they talk about trust, Confucian trust and what trust is. Two groups of students responded to the interview, one from Hong Kong and the other from the United Kingdom. In this part, the cross-sectional change in students’ views was examined as they progressed from the first year to the final

year of university. The results, including students' rituals, notions, attitudes, and performance, were analysed using a mixed-method comparative research methodology.

### **1.5 Notions of trust**

From a psychological point of view, trust is formed under certain scenarios that meet the interests of two or more parties, when the entrusted believe in mental tendencies (Lindstrom, 2011; Yoo, 2010; Yoon, 2010). From the sociological dimension view, trust is understood not only as a psychological phenomenon trusting an individual but also as a social phenomenon; that is, a product of social systems and cultural norms (Browne & Cook, 2011; Saylor, Keselyak, Simmer-Beck & Tira, 2011). Chinese scholar Zhang Jianxin cooperated with Michael H. Bond to establish the cognition model of interpersonal trust from the perspective of philosophy. They define interpersonal trust as the behavioural intention of giving physical or mental resources to a certain character in advance (Zhang & Bond, 1993). Philosophically, trust is a kind of mental state, which refers to the phenomenon having genuine duration (Wittgenstein, Anscombe & Rhees, 1953). In sociology, the concept of trust is connected also to the position and role that trust plays in social systems. Trust is like a bond in society. In philosophy, the philosopher Searle (1995) states that trust is one of several social constructs, as an element of the social reality. As a kind of social phenomenon, trust is difficult for people to evaluate precisely and adequately (Tillmar, M. 2009). However, scholars acknowledge the important role of a trusting relationship in education. For example, Gibbs (2004) argues that higher education is dependent on the trust relationship between teachers and students, which could motivate students to take their participation as credible and worthy. Peng (2000) argues that interpersonal trust is a sense of security that another party can complete the task or responsibility entrusted to them. According to Peng, trust is not only a type of individual psychology and behaviour, but also a social phenomenon closely related to the social and cultural environment.

With the development of society, the structure of trust and the mechanism producing trust will change correspondingly. Moreover, Zheng (2006) defines trust as an attitude and a medium for exchanging and communication, which is closely related to the nature of

human beings, the evolution of cooperation and rational choice. Therefore, trust is naturally connected to the relationship between both individuals and groups in the social system. When it comes to philosophy, some philosophers have argued that trust resembles a relationship of reliance, regardless of the fact that one party in the trust relationship, the relying one, runs the risk of being betrayed while the relied-upon party does not (Baier, 1986).

Taken together, trust during an interaction mechanism of action can be embedded in a functional integration mechanism in the social system in terms of culture, system and experience (Jeong et al., 2011; Wiltshire et al., 2011). In this proposal, trust refers to the relationship between a trusted party and the trustee. No party should trust each other by using their own weaknesses and shortcomings to make their behaviour detrimental to confidence. This confidence was entrusted before two parties come to act. The intensity of trust is determined by how much another party believes in the degree of psychological feelings and institutional norms. In essence, confidence is a complex trust and entrusting behaviour (Mirza & Redzuan, 2012; Richardson et al., 2012; Park, 2012). Among the trustee and trusted parties, trust is a bidirectional and mutual process at different levels in either direction, which has become more of a psychological requirement to form a bond due to the direct or indirect involvement of people. As a result, trust has become a complicated issue influenced by multiple factors (Constantinides, 2004; Bos et al., 2002).

The main idea of education, for Confucius, can be expressed in four words: 文 principle; 行 practice; 忠 loyalty; and 信 trust. Trust is to make people trustworthy, to keep their promises and to win the trust of other people. Trust is included in the content of education and the ideological education of political methodology, which means how to unite people, how to make people obey the orders and instructions of their superiors and leaders, how to establish the regime and how to use the power, how to build leadership, how to maintain the unity of faith in the whole society, and so on (Confucius, 1979).

There are many forms of trust. Interpersonal trust can be based on function or trustworthiness. As a form of interpersonal trust, the trust between teachers and students is also based on function and trustworthiness. Thus, whether students trust their teacher

depends on whether the teacher can provide valid information and whether they are reliable as teachers.

## **1.6 Limitations of scope and key assumptions**

### **1.6.1 Trust and higher education**

#### *1.6.1.1 Higher education and the role of higher education*

The history of Western higher education can be traced back to the medieval university (M.-F. Chen, 2012; Haines et al., 2014; Riva et al., 2014; Zhang et al., 2009). Later, through the development and continuous restructuring mainly of British, German and American universities, higher education took on its chief functions, namely training specialized personnel, scientific research and social services. Compared to nations in the West, China introduced higher education late, generally speaking in the later Qing dynasty, promoted by the Self-Strengthening Movement and the Movement of Reform from the end of the 1860s to the beginning of the nineteenth century. After the People's Republic of China was founded in 1949, the Chinese government devoted efforts to reconstructing the existing universities. The education system of Hong Kong (a previous UK colony), as a part of China, is a mixture of Eastern and Western.

Universities can be viewed as institutions for implementing higher education and academic research that are authorized to award degrees (Barton et al., 2014; Lindstrom & Mohseni, 2009). This is one of the functions of a university around the world, both in China and the United Kingdom. Universities can be classified by various criteria (Petersen et al., 2009). According to the disciplines they provide, they can be comprehensive, multidisciplinary or in the Billing Division (Se-Hun, 2010); and, according to the source of funds, they can be either public or private.

Funded by state governments, public universities in Western countries are more responsible for promoting community relations and beyond. They serve as platforms to cultivate a workforce equipped with expertise for special enterprises and society as a whole. Currently, state, society and school are committed to improve higher education policies and strategies for promoting social development (Jeong et al., 2010; Shin, 2010). That is because social development relies heavily on higher education. In these

circumstances, it is necessary to compare the various forms of trust in the teacher–student relationship in higher education with different cultural backgrounds to make an inter-cultural conclusion on whether trust is an effective factor in improving the relationship.

#### *1.6.1.2 Higher education in promoting social and cultural construction*

Cultural traditions, learning environment and other powerful factors work together to affect society. Culture is spread in higher education through the deep, spiritual culture, or core culture, thus it has a profound and long-term impact on society (Stuber, 2011). The spread of culture in higher education has affected cultural integration, with communication being the essence of various cultural traits. The culture of higher education is different from the accidental transmission of individual cultures and is the primary determining factor in knowledge construction. In addition, the implementation of higher education provides a platform for people to interact and communicate with each other. Higher education institutions are believed to be the leading force to guide society as a whole to promote cultural construction. What is more, the content of education will include ways to preserve and restore culture, which are critical to a sustainable society. Higher education thus has a profound, comprehensive and lasting social-cultural meaning. Cortese (2003, 17) emphasizes this notion by claiming that ‘higher education institutions bear a profound, moral responsibility to increase the awareness, knowledge, skills, and values needed to create a just and sustainable future’. Furthermore, Perry (1999) argues that higher education should be responsible for the intellectual and ethical development of adults. In short, the function of higher education can never be underestimated.

#### *1.6.1.3 Trust in the relationship between teachers and students in higher education*

Nowadays, it is generally believed that the sense of trust has declined dramatically. The world of higher education is no exception. The most representative example is the relationship between teachers and students (Muller et al., 1999).

Trust, which is considered to be a subjective feeling and a way to reduce uncertainty, is based on two-way interactive relationships that help to reduce costs, maintain social order, promote mechanisms for cooperation and provide new ideas to build harmonious

relationships between teachers and students (Corrieri, Conrad & Riedel-Heller, 2014; Serrano-Guerrero, Romero & Olivas, 2013). Trust plays a vital role in the teacher–student relationship. Firstly, the student is a person whose knowledge is from books, while the teacher is the person who obtains their trust on the premise of autonomy (Chen & Liu, 2013). Secondly, the most important element contributing to an ideal teacher–student relationship is cooperation (Haque et al., 2013). Finally, both harmonious and hierarchical relationships between teachers and students are necessary, and trust between teachers and students can be used to maintain and order the functions (Mott, Shellhaas & Joshi, 2013). If teachers and students trust each other, the process of imparting knowledge runs smoothly. Besides, students are encouraged to develop other abilities, such as critical thinking. Teachers can achieve a sense of satisfaction from the process of teaching, and feel that teaching is interesting and inspiring, not tedious.

### **1.6.2. Different views on trust in higher education in the Eastern and Western world**

#### *1.6.2.1 Chinese philosophy on trust in teacher–student relationship*

##### *1.6.2.1.1 Confucius' interpretation of trust in the teacher–student relationship*

In the history of education in China, Confucius was the founder of private schools. It is said that he had at least three thousand disciples during his life. He advocated that education should be provided to people from all walks of society, without discrimination. He led his followers on tour to various states and nations, staying together through thick and thin, during which they established good teacher–student relationships. In Yan Yuanzhang's opinion (1993), 'this is the ideal teacher–student relationship'.

There are three elements that contribute to the trust relationship between students and teachers: mutual respect; care in life; and a liberal academic atmosphere. The most important aspect in the trust relationship is that Confucius, the teacher, showed respect to his students. He advocated equality between students and teachers (Confucius, 1979). He firmly believed that his students, with diligence and perseverance, could someday exceed his achievements in academic fields. Therefore, he encouraged his students, especially those who had superior talents, to pursue their studies.



Confucius respected people's various dispositions and personalities as well, so he taught students in accordance with their aptitudes. If two students asked him the same question, he would give different answers because of their different personalities: 'His criticism was gentle and he tried not to hurt students' self-esteem' (Gao, 1992). The respect that he showed to his students won their respect in return.

In addition, Confucius and his students were on intimate terms, so they could care for each other not just in study but in daily life (Confucius, 1979). They accompanied each other in even the most perilous situations. They experienced all the sorrow and happiness in life. The relationship between them was more like that of father and his sons than of a teacher and students.

A liberal academic atmosphere cannot be ignored. As one of the greatest scholars in ancient China, Confucius never prided himself on his academic achievements. He would listen to his students' opinions carefully and discuss questions with them patiently. As for the knowledge he imparted, his students had the right to question and negate it.

With mutual respect, care and a liberal academic atmosphere between teachers and students, a trust relationship is likely to be formed (Confucius, 1979).

#### *1.6.2.1.2 The influence of 'the absolute authority of the teacher' on trust in the teacher-student relationship*

The philosophy of 'the absolute authority of the teacher' was the essence of the teacher-student relationship in Chinese feudal society (Pan Li-Yong, 2012). According to Mencius (2009), the purpose of education is to understand human relationships, and people are forbidden to cross the boundaries. In other words, in teacher-student relationships, students are forbidden to do things to offend their teachers and should follow their directions. Another representative of the Confucian school, Xunzi, made the greatest contribution to promote teachers' position. He held the view that teachers should be placed on the same level as that of the great ancestors (Hutton, 2016).

Dong Zhongshu in the Han dynasty strengthened teachers' authority. When he imparted knowledge to his students, he would pull down a curtain between students and himself.

As a result, students could only hear his voice, not see his face. He even forced those who discussed questions with him to regard him as their teacher.

Due to the influence of ancient philosophers and educators such as Mencius, Xunzi and Dong, ‘the absolute authority of the teacher’ has a prevailing influence on teacher–student relationships in the Eastern education system. It shapes the relationship as hierarchical: teachers are placed in a higher and more authoritative position and students are in a lower and more passive position. Therefore, the trust relationship that Confucius formed has been weakened in favour of a teacher-oriented philosophy. Students may show due respect to their teachers and follow the orders that they are given, but mutual respect is missing from the relationship: they do not necessarily trust their teachers.

*1.6.2.1.3 The decline of ‘absolute authority of teachers’ on trust in the teacher–student relationship*

Feudalism in China ended in 1911. Cai Yuanpei, as the governor of education, made a thorough reform of the field of education. According to him, higher education in universities should have an open atmosphere. Students were encouraged to develop their overall ability, not only in academic study but in moral character and physical exercise.

The intellectuals in the May 4th Movement in China advocated science and democracy instead of feudal ethics such as ‘the total authority of the teacher’. The philosophy governing feudal society was no longer popular. Cai Yuanpei, together with the May 4th Movement, attacked the teacher-oriented tradition and strengthened democracy and equality in the teacher–student relationship. Students no longer viewed their teachers as supreme. They longed for equality between students and teachers to lay the foundation of trust between them.

To sum up, nowadays teachers are still respected by society but are not regarded as in the supreme position as in ancient Chinese society. Moreover, the trust between students and teachers is presented differently from Confucius’ teacher–student relationship, from the perspective of equality, mutual respect and interpersonal relationships.

#### *1.6.2.2 Western philosophy on trust in the teacher–student relationship*

In the history of Western countries, discussion on higher education falls into two categories: traditional teacher-oriented theory; and modern student-oriented theory.

##### *1.6.2.2.1 The influence of traditional teacher-oriented philosophy on trust in the teacher–student relationship*

The German educator Johann Friederich Herbart developed a theory that teachers should govern students to keep things in order. He agreed with Austin's 'original sin' theory, thus advocated that punishment should be an important part of education. Under the influence of that theory, the teacher is in the dominant role in the educating process and students are subordinate. Students obey teachers' instruction for fear of punishment, and they do not trust their teachers.

Mencius (2009) advocated that goodness is rooted deep in the hearts of people but is often impacted on by the outside environment. If a vicious environment suppresses this original goodness, people will become bad. So-called villains are not inherently evil, but can do good. It is a struggle between born goodness and subsequent evil. Unfortunately, the goodness rooted inside people cannot always be exhibited.

This view of human nature held by Mencius is different from that of Xuncius. Xuncius (2009) proposes that human nature is evil, but goodness is subsequently acquired. People are born to like benefits and lust, yet this will have a bad effect if people are indulgent. Only education and ritual can correct and constrain human nature, so the ancient sages insisted on ritual and a system to guide them. Without education, people would become evil and dangerous; without etiquette, people would violate the law and discipline and become restless and unreasonable. Therefore, it is those people who indulge in an evil nature, emotion and arbitrariness and are contrary to the propriety of etiquette who are the villains. The nature of people departed from its original simplicity and original qualification when they were born, when they lost their good nature.

Rousseau (1985) put forward the idea of the noble savage: in our natural state (in this state, animals exist but not yet civilized human beings), human nature is good, and is noble. Good people are tortured and eroded by their social experiences. Also, the development

of society leads to the continuation of human misery. He views that the accumulation of knowledge strengthens the rule of the government and suppresses the freedom of the individual. He concludes that the development of material civilization, in fact, destroys sincere friendship, which is replaced by jealousy, fear and doubt.

As a philosophy, Rousseau advocates that feeling is the source of knowledge, and he adheres to deism; he emphasizes the goodness of human nature; he considers faith to have priority over rationalism; in education, he advocates that the objective of education should be the cultivation of a natural person; he wants to improve status of children in education; he also considers the reform of education in terms of both content and method; education should follow the nature of children, to let them develop freely in mind and body (Rousseau, 1985). This reflects a notion of the bourgeoisie and the proletariat being liberated from feudal autocracy.

#### *1.6.2.2.2 The influence of modern student-oriented philosophy on trust in the teacher–student relationship*

The representative of student-oriented theory is the American philosopher and educator, Dewey. He is the leading figure of pragmatic philosophy. Based on pragmatic philosophy, he put forward such ideas as ‘education is life’ and ‘school is society’ (Dewey, 1997). From his point of view, the development of students is a natural process and does not need a teacher to be dominant. Due to his influence, students in the United States enjoy much liberty. Teachers are compelled to give more freedom to students. Students become more liberal, as a result. As mutual respect and equality are essential in the relationship between the two, it can be deduced that there is more trust in the teacher–student relationship under this philosophy, which encourages a teacher–student relationship of equals, than in a teacher-oriented philosophy (Allport, 1950).

In brief, people hold various attitudes towards teacher-oriented and student-oriented education in the Western world. They both have their advantages and disadvantages. From the perspective of trust in the teacher–student relationship, there is less mutual trust in teacher-oriented education than in student-oriented education. Trust in Western countries

is based more on evidence than on personal and blood relationships, which are important in Eastern countries.

### 1.6.3 Operationalizations of Schools of thoughts in Eastern and Western education systems

Confucianism originated in ancient China more than two thousand years ago and gradually has become a major influence of the East Asian societies. The frequent communications between China, Japan, and Korea share core values of Confucianism. Confucius, as a teacher himself, was considered a role model to many of the following teachers in China, Japan, and Korea. His way of teaching and communicating with students was widely studied and copied by teachers in these places. Hong Kong is indicative of the Eastern education systems, given it was part of the Chinese society and shared the same beliefs and cultures.

The Socratic school of thought was originated around a similar period in classical Athens. While having his influence in a diverse range of cultures and societies, his way of teaching and beliefs in education was always considered the foundation of the Western education systems. The UK is indicative of Western education systems, given that its mainstream values and beliefs aligns with values promoted in Socratic schools of thoughts.

#### 1.6.3.1 Limitations on the approach

In the current dissertation I use the term “Western” and “Eastern” as equivocal terms to present the many and complex cultures of what are envisioned as complex geo-political separations but whose boundaries are conceptually cultural, rather than geographical. Essentially, Western culture refers to independent self-construals while Eastern culture refers to interdependent self-construals as the main societal value (Markus & Kitayama, 1991). The East–West dichotomy characterised here and which is reflected in the literature used here has been used in studying a range of topics, including politics, economics, psychology, and linguistics. Not until recently have researchers made an effort to move the discussion beyond the simple East–West dichotomy to be more inclusive and diverse, yet the binary distinction between the two distinctive social forms still has a great

influence on a variety of functioning systems, including the education system (e.g., Vignoles et al., 2016).

In the current study, clearly however, the education and a philosophic positions are insufficient to give clear distinction of the diverse forms of comparative cultural difference. To undertake such a comprehensive study that would representative an idealized western or eastern cultural is clearly beyond the scope of the current research project, and perhaps beyond any project.

In the current study, two universities were selected within cultures which would be recognized as Western and Eastern, that is the UK and the Chinese territory of Hong Kong. Given the research was conducted in the settings of case studies and in indicative sites of Western and Eastern culture values, there is relevance and value in the current approach taken. The current study adds to the knowledge of cultures, as well as provides interesting and indeed important implications in higher education settings located in Eastern and Western cultural environments. However, there were of course limitations and external validity concerns to generalize the findings.

The research design is open for discussion and criticism.

## **1.7 Summary**

This chapter provides a holistic look at this study, with an overview of the background to the research, the research problem and hypotheses, and a brief introduction of the methodology used. An outline of this dissertation follows, and notions of trust were defined from a collective viewpoint, combining various social science theoretical orientations. This chapter addresses assumptions and limitations in the study of trust from the setting of study (i.e. higher education) and cultural norms.

The notions of trust and assumptions of context in which trust presents will be carried over to the next chapter, where a more detailed review of trust in past literature is conducted.

## **2 Literature Review**

### **2.1 Introduction**

The term ‘trust’, although used frequently in daily conversation, may have different meanings in different contexts. Trust refers to an interpersonal positive relationship and can serve as a basis upon which a more stable connection can be built and developed. Besides being used in individual relationships, trust can also be used at group, community or organization level in a variety of contexts (Pope, 2004). To be specific, in the field of higher education researchers have studied the notion of trust at various levels with specific focuses. For example, researchers have conducted studies to understand the public’s trust in faculty members’ work, the faculty’s trust in administrators, the faculty’s trust of other faculty members, students’ trust of higher education, students’ trust of faculty and students’ trust of themselves (Cook-Sather, 2002; Ghosh, Whipple & Bryan, 2001).

This review aims to critically examine the literature on the issue of trust in higher education to provide researchers and educators with a thorough understanding of these various levels of trust, mostly in the context of Western culture systems, and point out a gap in the literature on trust in Confucian-inspired cultural systems. This review is organized as follows: section 2.2 discusses the notion and dimensions of trust; section 2.3 gives an overview and illustrates various levels and types of trust in Western higher education, highlights the trust between faculty and students, and reviews the strategies to improve trust in Western higher education; section 2.4 compares the trust developed in Confucian educational systems to that in orthodox Western contexts and analyses how university trust is affected by different cultural systems.

This provides an overview of trust in various culture systems, thus educators in Eastern and Western culture systems could explore the possibilities to communicate with and learn from each other. After the overview, I will use it as background information to conduct the research and investigate trust in the teacher–student relationship in terms of Eastern and Western cultures.

## **2.2. Basic understanding of trust: definitions and dimensions**

### **2.2.1 Definitions of trust**

What is trust? Although this word is commonly used in daily conversation, little consensus has been reached on its meanings. Many researchers have made attempts to reach agreement by taking multiple paths. There are three interpretations of trust prevalent in Western academia.

#### *2.2.1.1 Trust as personal expectations*

Rational choice models are commonly accepted as a foundation to explain people's social behaviour. Deutsch (1958) describes trust as an irrational choice, when that person expects the future loss to be greater than the future gain (Deutsch, 1958). Golembiewski and McConkie (1975) link the notion of trust to reliance and confidence, and reliance seems a non-rational choice, based on personal perceptions and experience. From a rational perspective, trust is defined as a calculation of the likelihood of future cooperation. Calculated trust is treated as a type of calculated risk, and the notion of trust is sometimes taken as a measure of willingness to take a risk (Williamson, 1993).

#### *2.2.1.2 Trust as interpersonal relations*

Although the decision of trust is made by one person, the consequent decision on whether to continue the trust relationship is dependent upon others' actions. As Zand states, trust is the willingness of one person to increase his or her vulnerability to the actions of another person (Zand, 1972). Vulnerability and dependence have been broadly considered the most important components in a 'trust' relationship (Michalos 1990; Gambetta 2000), but the ultimate goal of trust is to attain net benefits for all parties involved in the relationship. In another study, trust is defined as the 'willingness to be vulnerable to the actions of another party based on the expectations that that party will perform an action of importance' (Rousseau et al., 1998). According to this definition, trust implies a positive relationship and will bring beneficial outcomes to all parties involved, even though there are some risks. Trust at an organizational level can be complex, and researchers have added to the complicating factors in this topic and explored various dimensions. In superior and subordinate relationships, trust by the superior can be a key factor in the



promotion of a subordinate (Jennings, 1971), and trust by the subordinate can be essential for effective action by the superior (Gabarro, 1978).

#### *2.2.1.3 Trust as social mechanisms*

The process of economic development tends to shift trust from the field of interpersonal relationship into that of a social mechanism, according to Weber Eisenstadt, cited in Bluhm (1987). Lewis and Weigert (1985) believe that trust is a collective attribute, based upon interpersonal relationships in society, and conclude that trust goes beyond the individual level and instead is social, normative and requires social structures (Lewis & Weigert 1985). Trust is strongly dependent on other groups and institutions, and it is a requirement for effective operation (Sztompka, 1999). Trust is referred to by Hosmer (1995) as ‘the reliance by a person, group or firm upon a voluntarily accepted duty on the part of another person, group or firm to recognize and protect the rights and interests of all others engaged in a joint endeavor or economic exchange’. The reliance is associated with an expected benefit, and uncertain risks and vulnerability are associated with the party that trusts the other (Hosmer, 1995).

There are at least four initial components in the previous definitions of trust that contribute to its construction, including competence, openness, benevolence (concern) and reliability. All four requirements have to be met to be perceived positively. For instance, in a university institution, to be trusted by the faculty an administrator ideally needs to be good at skills (competence), communicate and share information with the faculty (openness), be concerned about the welfare of faculty (benevolence) and, finally, be consistent in his or her actions (reliability). Therefore, organizational trust is the accumulated sum of these four components taken from the members of the organization (Pope, 2004). Sometimes researchers add another component, honesty, to this concept, and the five form an integrated construction of trust in schools (Hoy & Tschannen-Moran, 2007). Hoy and Tschannen-Moran (2007) define trust as ‘an individual’s or group’s willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest and open’. This definition captures the major elements of trust in educational settings.

Trustworthiness is a virtue embodied in people who are worthy of trust (Small, 2005). It is different from trusting, in that trusting means to trust without any discrimination, while trustworthiness means that something can reliably be trusted. People can trust others who will spare no efforts to achieve the goal, keep their word to accomplish things or make commitments; that is, people's actions are coordinated with it. Trustworthiness is a very important step on the road of success (Small, 2005). People establish trustworthiness when they make promises and make sure that they keep them. People are responsible for commitments even when it is hard to follow the rules. People should commit themselves to their work, against all odds.

Distrust cannot be simply taken as the absence of trust, and it is far from being the absence of reliance (Hardin, McCool & Baumhackl, 2009). Distrust also has standardized dimensions. When one finds out that one has mistakenly distrusted another, reactions such as regrets, apologies and asking for forgiveness will arise. Distrust covers issues of non-reliance and negative attitudes. People think that others lack some positive aims, which may cause the distrust (Hardin, McCool & Baumhackl, 2009). They also think that others will make people frustrated and lose faith. People who lie and cheat for future purposes will be distrusted.

### **2.2.2 Dimension of trust**

The dimensions of trust are conceptualized by researchers in various ways. Some (Mayer et al., 1995) consider that they can be divided into three important parts, including integrity, competency and benevolence. These can be seen as fundamental elements to fulfill one's promises (Butler, 1991).

#### *2.2.2.1 Integrity*

Integrity is related to the notion of when a trustor finds that a trustee can keep their promises and principles. This notion can prove that their future behaviour will be consistent with their past behaviour; there are trustworthy communications and strong fairness. Integrity can affect the whole trust, because it can predict issues that can be extremely uncertain in future. Researchers have recognized that integrity shares some

characteristics with other concepts, like value congruence, congruity and consistency (Butler, 1991).

#### *2.2.2.2 Competence*

The element of competence mainly deals with the skills, abilities, capabilities and characteristics of a group or domain, like the party, organization, university and company, which have strong influence. Some scholars consider that, in the notion of a trustor, the competence of a trustee may be the basis for future cooperation (Sako, 1992). Some researchers consider that competence cannot be taken as an overall trait because it always stems from knowledge, information, ability and professionalization (Butler, 1991).

#### *2.2.2.3 Benevolence*

The virtue of benevolence arises on occasions when one party thinks the other has aims and motives that are in the interest of the former. Its essence is that one is willing to aid the other. Benevolence can be seen in many situations. For instance, people provide support, consider the welfare of others, refrain from selfish impulses and take responsibilities. People show consideration for others and they are sensible to the requirements and interests of others. They voluntarily protect these benefits and interests. At the same time, they also deny any opportunistic issues (Butler, 1991).

Philosophically, trust is a kind of mental state or state of mind. The use of the expression 'state of mind' is restricted to phenomena with a genuine duration (Wittgenstein, Anscombe & Rhees, 1953). Genuine duration means that the beginning time or ending time can be identified with a watch. However, this concept is not enough to define trust, because plenty of other phenomena also have genuine duration; for example, the pain we sometimes feel has a beginning and ending time, but pain will never be trust. According to Lagerspetz (1998), trust may be defined as the unconscious mental state of expectation that has a genuine duration and does not become conscious until the expectation is shattered. According to this definition, when someone says, 'I trust him', they do not yet really trust him, because they cannot arrive at that conclusion unless they weigh their trust against their distrust.

Past studies have introduced the concept of trust from different dimensions, including but not limited to integrity, competence, benevolence and a philosophical state of mind. Trust is a social construct. The experience of trust depicted in Western literature is subjective, due to cultural and societal variance. Scholars and researchers describe versions of trust by drawing on their own unique experience, which might or might not share a cultural background with the subjects of this study. Dimensions of trust listed in this section can provide some ideas about trust but are not considered universal and equivalent to the subjective experience of trust in the current study.

Measurement based on subjective experience has been much less studied than measurement of the length of an object or the temperature in the laboratory. What is more, the measurement may not be reliable or valid due to the investigator's own subjectivity, as per the Hawthorne effect (by changing the behaviour of those being observed), which states that the presence of an investigator will affect the result of measurement. On the other hand, the title of Schopenhauer's famous book, *World as Will and Representation*, simply indicates that subjectivity is represented by objectivity. People could acquire the information of subjectivity by measuring objectivity due to the representation process. Obviously, pure investigation based on subjectivism is impossible. In this sense, a pragmatic approach is more reasonable.

## **2.3 Trust in Western and Eastern Cultural Contexts**

This section overviews the values of trust in Western and Eastern cultures and the comparative differences of trust across cultural contexts. The idea of trust in different social and cultural backgrounds may render different meanings. The discussion of trust in the current section takes into the account of the cultural backgrounds, as well as prepares future discussions of trust in a more narrowly defined setting of the higher education system.

### **2.3.1 Trust in Western cultural context**

The majority of research of trust and trust values is conducted in an ethnocentric monoculturalistic setting, with samples of predominant the white, middle-class, male population. On the one hand, past literature on trust compromises with the bias coming

from a white-anglo perspective. On the other hand, the profound literature in western values of trust presents ample evidence of the cultural understanding on this concept.

People from western cultures tends to show differential levels of trust on different settings. Ortiz-Ospina and Roser (2019) showed that European countries in general had high levels of trust in the police system. There are some within group differences regarding interpersonal trust. For example, around 60% of people in Sweden believed that “most people can be trusted,” while only 30% from UK agree with the same statement. Besides, European countries had higher levels of trust in interpersonal relationships than in political systems. Alagan and Cahuc (2010) showed that higher levels could lead to higher income levels. As a result, western counties with high levels of trust, like Norway, Sweden, and Finland, had comparatively higher income levels.

A study done in the US has shown that the steady decline of interpersonal trust and people’s trust in government over the years, with a historical low in the present day (Ospina & Roser, 2019). People’s level of interpersonal trust dropped from 40% in the 1970s to around 30% in the 2010s. Similarly, back in the 1950s, 70% people showed trust in the government. While in the 2010s, only 20% showed trust in the government.

### **2.3.2 Comparing trust across cultural context**

Ospina and Roser (2019) outlined some key difference in levels of trust between countries with different cultural background, and they found that there were remarkable differences in levels of trust, even in neighboring countries sharing similar cultural backgrounds.

In the same study assessing interpersonal trust, around 40%-50% of the samples from Hong Kong, and 50%-60% of the samples from China believed that most people can be trusted from the 1990s to the 2010s, showing high levels of interpersonal trust. However, only 27% of South Korean and 36% of Japanese agreed with the statement. As mentioned, Sweden, Norway, and Finland showed high levels of interpersonal trust, with 57% of Swedish and Norwegian as well as 73% of Finnish believing most people could be trusted. However, only 19% of the French, 29% of the British, and 32% of the German agreed with the same statement.

### **2.4.1 Levels and types of trust in Western higher education**

This section explores the various levels and types of trust in higher education, followed by a review of methods to improve communication and eventually improve the trust relationship between groups. The majority of literature surrounding trust in higher education has focused on a Western, White, middle-class population. Few studies have looked specifically at trust in the higher education of Chinese students and teachers. That said, the current study would like to use a conversational discussion to concentrate on trust in higher education communities.

#### *2.4.1.1 Importance of trust in higher education*

Trust and cooperation among students, teachers and parents lead to gains in student learning, whereas distrust and weak cooperation are less likely to improve teaching and learning (Goddard, Tschannen-Moran & Hoy, 2001; Bryk & Schneider 2002; Hoy, 2002). Based on the interviews and surveys of students, parents and school panels, Cohen et al. (2009) report that a cooperative school climate that promotes group cohesion, respect and mutual trust makes sure that students feel safe and supported, thus is essential to their academic achievement. At an organizational level, trust can lower transaction costs and enhance inter-organizational and manager–subordinate relationships.

A trusting atmosphere among teachers in a college or university is essential to ensure sustainable development, and is seen as a significant predictor of teachers' job satisfaction and commitment to education and research (Lee, Zhang & Yin, 2011; Van Maele & Van Houtte, 2012).

Trust, as a means to develop and maintain long-term relationships, can be used to enhance the quality and quantity of new students and, significantly, to save marketing costs in recruitment in an increasingly competitive environment (Ghosh, Whipple & Bryan, 2001). Students are less likely to transfer or exit if they trust their colleges or institutions. Alumni who are trusting are more likely to make financial contributions.

#### *2.4.1.2 Student trust in colleges*

Student trust in a college is 'the degree to which a student is willing to rely on or have faith and confidence in the college to take appropriate steps that benefit him or help him

achieve his learning and career objectives' (Ghosh, Whipple & Bryan, 2001). Student trust is likely to be affected by the following characteristics of a college: expertise (technical competence), cooperation (willingness to work together), timeliness, congeniality (friendliness, courtesy and goodwill), openness (willingness to share information), tactfulness, sincerity (honesty and intention of fulfilling promises) and integrity (unwillingness to sacrifice ethical standards to achieve organizational objectives). Of these values, sincerity, expertise and congeniality are the top three influential elements of student trust in a college.

#### *2.4.1.3 Faculty's trust in administrators, colleagues and students*

The basic premise of various approaches to educational policy and practice is trust (Cook-Sather, 2002). However, it has to be admitted that historical and current educational practices in the West have reflected a basic lack of trust in students by both educators and educational researchers: students are kept under control, as passive recipients. These practices are a reflection of the dominant educational model in the twentieth century in the West. According to this model, learners are commodities to be classified or a blank paper to be filled (Spring, 1976). Students are dehumanized and reduced to products. Thus, it is absolutely impossible to develop trustworthiness in products. Cook-Sather (2002) argues that students should be included in the conversation and their perspectives authorized through a significant change in the ways of thinking and policy-making.

Van Maele and Van Houtte (2011) explore the level of faculty members' trust and the association between faculty trust and organizational school features in Flanders in Europe. Trust can positively affect the functioning and effectiveness of schools. In fact, positive relationships based on trust are an integral part of an organization's social capital, and thus strengthens its effectiveness. A survey conducted in 2014 about teachers across 85 schools in Flanders suggested that teachers distinguish among trust in students, parents, colleagues and the principal, and teachers from the same school tend to express similar levels of trust. It is also found that faculty members' trust in the principal is closely interrelated with faculty's trust in students. Organizational trust can be explained by organizational culture, organizational scale and organizational group composition, reflected in the school's socioeconomic, gender and immigrant composition.

Socioeconomic school composition affects faculty trust remarkably: a high socioeconomic student composition is associated with a high faculty trust in students and parents; and trust in colleagues in private schools is higher than that in public schools (Van Maele & Van Houtte, 2009).

Faculty trust is strongly related to teachers' job satisfaction. According to Van Houtte (2006), teachers in technical/vocational schools tend to show less satisfaction with their jobs than those in schools providing general education, because those technical/vocational schools are less study-oriented than their comprehensive counterparts. Faculty members' distrust evokes job dissatisfaction. Besides, teachers in technical/vocational schools are less stable and move jobs more (Van Houtte, 2006).

Studies in the United States have revealed that relationships between teachers and administrators are less trusting than those between teachers and their colleagues (Bryk & Schneider, 2002), and this finding suggests that leaders need to build trust to sustain effective management. The empirical data further show that the authenticity of leaders' behaviour is significantly correlated to trust in the principal, and teacher authenticity is also highly related to trust in colleagues. Authentic behaviour includes three basic aspects: 'accountability, non-manipulation and salience of self over role' (Tschannen-Moran & Hoy, 1998).

If faculty members want to establish trust with students, they should know the management and governance of the students (McCaffery, 2010). Awards, punishments and other activities should be administered. Threatening actions and words can never be a part of the controlling behaviour, as they can evoke aggressive actions in students. Teachers should be honest with students. If there are changes, like amended timetables, training and careers, teachers should inform students in advance to prepare them and avoid negative actions. Students should be given more opportunities to make decisions and choices of their own will. Language is a good way to express trust. Teachers should focus on the strong points, instead of the weaknesses of students. (McCaffery, 2010).



#### *2.4.1.4 Trust in mentoring*

Erdem and Aytemur (2008) explored the role of trust in mentoring relationships in universities. The functions of mentoring include academic development, career development and psychosocial support. Researchers conducted an interview-based study of protégés in academic mentoring relationships. The research reveals that the scientific competence of mentors seems inadequate to provide guidance on new areas of study, which frustrates the mentee, especially at the dissertation-writing stage. Most positive perceptions of mentors were based on their personal efforts, whereas most negative perceptions were related to the faculty and university culture, regulations and mentors' and mentees' personal characteristics. It was found that a positive mentoring relationship did not always ensure an equally positive perception of university life, but a negative mentoring relationship was always associated with a negative perception. Furthermore, a major reason for quitting was a negative mentoring relationship. It is suggested that universities should frequently review any inadequacies in the mentoring system and use instruments to address these inadequacies, and that mentors' performance should be evaluated periodically (Erdem & Aytemur, 2008).

#### *2.4.1.5 Trust in friendship among students*

Trust is the foundation to any relationship, especially to friendship, which is a common type of relationships in college students, and it can grow only through trust. Research by Warris and Rafique (2009) investigates the differences in trust between male and female same-gender friendships. Based on a sample of 80 students from five universities in Lahore in Pakistan, it was found that the level of trust is higher in female same-gender friendships than in male. They found a strong correlation between trust and friendship (Warris & Rafique, 2009). Continuing on the theme of trust in university students in Pakistan, Warris and Rafique (2009) investigated the gender difference in trust perception in opposite-gender friendships and found that female and male students display the same level of trust and that several factors, including parental acceptance of opposite-gender friendship, similarity in social, cultural and economic status, urban background and the disclosure of the opposite-gender friendship to same-gender friends, are considered to be associated with trust (Rafique & Anjum, 2012).

#### *2.4.1.6 Trust related to inter-organizational and multi-agency partnerships*

Partnership has been promoted as a strategy to improve education provision and to encourage learning engagement in some countries, including England, Australia and Canada (Jones & Bird, 2000; Billett & Seddon, 2004). Dhillon (2007) discusses the role of trust in inter-organizational and multi-agency partnerships in England. In Dhillon's interviews with senior managers of education providers, over 70 percent of the interviewees mentioned that it is trust that makes a partnership work effectively. It is conceded that building trust as part of the process of partnership takes time and effort. Therefore, both individual and organizational commitment is important to an effective partnership (Dhillon, 2007).

#### **2.4.2 Strategies to improve trust in higher education**

Increasing the frequency and duration of out-of-class communication can possibly improve trust between students and faculty members (Jaasma & Koper, 1999). Based on a sample of 274 students at two medium-sized universities in the United States, the data analysed by Jaasma and Koper (1999) show that trust is positively correlated with the frequency of informal contact, student satisfaction and socializing during informal contact.

Some studies show that student participation in community service or volunteer work has positive effects on the development of leadership skills and students' trust in and loyalty to the college. Faculty members' and students' engagement in community service also helps the college to gain more trust from the public (Antonio, Astin & Cress, 2000).

#### **2.5 Trust in different cultural background**

Trust has been a long-standing concept in Western and Eastern thought. Though trust may have various meanings and be reflected in various levels of behaviour in Western and Eastern philosophies and cultures, it is commonly regarded as a positive asset. The trust relationship between two individuals can be complex, because it changes as the conditions change and, to some extent, it is unpredictable; and trust at an organizational level is much more complex, involving an analysis of individuals, group interactions and a thorough understanding of the connections between the group members (Tierney, 2008).

## **2.5.1 Trust in Eastern education systems**

### *2.5.1.1 Trust and Confucianism*

Xin (信) is a notion in Confucianism that is similar to the term ‘trust’ in Western culture. The five most important ideal ethics are *ren* (humanity/benevolence), *yi* (righteousness), *li* (propriety), *zhi* (wisdom) and *xin* (trustworthiness) (Xing, 1995). *Xin* (信) is a basic attribute of a person of good virtue, and it means being trustworthy and consistent in verbal commitment and action. The essence of Confucian philosophy can be summarized as ‘to respect the old, educate the young, and trust your friends’ (Delhey & Newton, 2005). With regards to trust between teachers and students, trust reflects a sustainable mutual relationship.

### *2.5.1.2 Confucianism and trust in higher education of Asia*

Various countries in East Asia and Southeast Asia, including Japan, Korea, China (Mainland, Hong Kong and Taiwan), Vietnam and Singapore, comprise a ‘Confucian-influenced’ education zone, though these countries differ significantly in their national traditions and languages (Marginson, 2011). Confucian education systems are characterized by four interrelated features. The first is close supervision and control by central government and detailed shaping of agendas and activities; the second is increased participation in higher education, followed by an increase in the proportion of tuition costs funded by households, rather than the state; the third characteristic is the one-chance national examination system; and the fourth is accelerated public investment in research and world-class universities. Confucian higher education systems differ drastically from those models in Europe and America. Educational government and the universities are closely related, and the development of political power is one of the essential features (Marginson, 2011). In Confucian models, usually it is the public universities, directly under control of the Education Ministry, that have the highest reputation, and private and often commercial colleges are at the bottom in terms of quality and public trust. This is quite different from the United States, where some private universities, especially Ivy League universities, are the top universities.

Influenced by Confucian traditions, teachers often view the school as a hierarchy, and, to some extent, teacher participation is hierarchical. For example, being at a different level

in administration implies different expectations of participation (Cheng & Wong, 1996). In a hierarchical system, people show great deference and respect towards those of senior status in all social relationships. Decisions are expected to be made by those in positions of authority (Hallinger & Kantamara, 2000, 2002).

Lee, Zhang and Yin (2011) analyse the influences of Confucian thought on Korean higher education from the perspective of educational administration. Korean educational administration is found to be hierarchically authoritative, and autocratic managers are preferred. Some positive Confucian values and principles, such as passion for education and an emphasis on sociopolitical collectivism, have been adopted by most education organizations. It can be viewed as a combination of tradition and modernization (Lee, Zhang & Yin, 2011).

Researchers have suggested innovative approaches to educational change and applied these approaches in different social cultures (Hallinger & Kantamara, 2000). A case study on change in the leadership role in traditional Thai schools comments that modern educational reforms will fail without a deep understanding of Thai traditional cultural norms (Hallinger & Kantamara, 2000). A successful approach to promote trust is to create a sense of belonging in their schools. All staff work as brothers and sisters, with mutual respect and a high level of trust, and this family atmosphere strengthens trust among colleagues and eliminates any sense of uncertainty.

Influenced by the trend of economic globalization, policy-makers in Japan started its educational reform in 1980s. Japan realized that simply following the existing American or European education models would be insufficient to build a modern, internationalized education system of its own. International students in Japan have increased drastically since the 1980s, and the leading research universities are facing an increase in international students. For instance, the University of Tokyo is in partnership with Peking University and Seoul National University, strengthening its communication and networking with other research universities in East Asia (Yonezawa, 2003). However, it is suggested that the higher education of Japan does not enjoy a high level of trust from the public, at least in the industrial sector. An important obstacle to improving Japanese

higher education in this global community is the mutual trust among government, educators, industry, students and parents (McVeigh, 2002). As Horie (2002) points out, educational reform in Japan has been successful in improving the quality of higher education and widening the participation of students from any background, nevertheless those high school graduates from ethnic minorities have only a slim chance of higher education, and residents who have completed their high school years in Korea, China and other countries encounter systematic obstacles before they are admitted to a Japanese university (Horie, 2002).

#### *2.5.1.3 Confucianism and trust in higher education in China*

As stated above, China is one of the countries in the Confucian-influenced education zone in Asia. Similar to other studies reviewed above, Chan (1999) summarized five characteristics of Chinese students: (1) an emphasis on the perception of the concrete; (2) non-development of abstract thought; (3) an emphasis on particulars, not universals; (4) practicality as the central focus; and (5) a concern for reconciliation, harmony and balance. Though the Chinese learning style has its advantages, it has some major problems. There is a lack of student participation and limited group discussion in class, and Chinese students are less creative and more passive and compliant than students from a Western culture (Chan, 1999).

Public higher education schools are dominant in China, however private universities have been growing in terms of quality and quantity since the 1980s. The private education sector is facing challenges in a context where national and provincial government wants to maintain tight control and where private education is viewed as a ‘necessary supplement’ to public education (Lin, Zhang et al., 2005). Many private universities are struggling to build mutual trust between their faculty and students and the government. To build up trust with these stakeholders, they first have to work on their internal quality to maintain a good reputation, so they can become more competitive in recruiting new students. Building trust with faculty is also a big challenge, because private colleges are competing with the second-tier colleges of public universities, and experienced teachers from these universities are being assigned to teach extra classes because of the significant increase in student population. As a result, private colleges or universities are forced to

hire a large number of young teachers, and these universities need to develop a loyal teaching force to sustain their education quality. Private universities are moving towards an open atmosphere that fosters communication between administrators and teachers. To attract and keep students, private universities are making efforts to improve their education quality and impress students and parents with their advanced facilities and infrastructure. At some universities with a poor quality of education, the drop-out rate is quite high. There is great pressure on teachers, who may be laid off if students lag behind in understanding the course material or the drop-out rate is relatively high. In terms of support and trust from the government, there is still a long way to go. Few private universities have been authorized to award four-year Bachelor's degrees, and it is nearly impossible for private universities to receive research funding or to participate in government-sponsored projects (Lin, Zhang et al., 2005).

Some researchers have analysed whether being the only child at home has affected the degree of interpersonal trust of college students in China (Zhang & Wang, 2003). However, a survey of 600 participants in Nanchang found no significant difference in interpersonal trust between college students who have no siblings and those who have one or more.

#### *2.5.1.4 Summary of trust and Confucian education*

Teacher–student relationships in China and other Asian countries are deeply affected by traditional Confucian values and the respective educational systems in their regions. The blending of tradition and modern higher education systems has shaped the unique teacher–student relationship among Confucian Asia countries. Thus, reciprocal respect and trust are largely established upon these unique characteristics. Influenced by the cultural tradition, Chinese and other students of Asian countries respect and trust their parents and teachers, and parents regard teachers with considerable respect and trust. A teacher is regarded as a model of virtue for others in Chinese culture (‘为人师表’, in the Chinese idiom). In China, moral education is considered even more important than intellectual education. Teachers’ trust, based on the Confucian concept, is built upon the effort that students put into their study and their respect for their teachers, as well as the usual virtues. However, the reform and development of modern higher education systems in East Asian countries have resulted in a change in the trust between educational administrations and

teachers, parent and teachers and, ultimately, teachers and students, such as the increasing trust in private school teachers in China. There are increasing concerns over whether the implementation of Western education tradition will jeopardize the traditional, Confucian-oriented educational value and pedagogy and thus result in the decline of trust between teachers and students.

### **2.5.2 Socrates in Western education philosophy**

It is believed that some principles in the pedagogy of Western countries were influenced by the Socratic tradition. The Socratic method can be found in the Platonic Dialogues, produced 2500 years ago. Teachers should question their students craftily, based on teachers' experience, and lead the neophytes to discover new knowledge and skills, thus, to talk or verbally participate is an important feature in Socratic classrooms (Ryan & Louie, 2007). The Socratic educational philosophy has been referred to as 'midwifery theory'; the teacher works as an agent to help to deliver the knowledge that is already in the student (Crosby, 1981).

#### *2.5.2.1 The power of questioning*

Questioning is a very important factor in the teacher–student relationship. It is both an instrument and a mirror. It is an instrument, in that it can work well for the students to ask their teacher questions to obtain good feedback as a stimulant. It is also a mirror; it will reflect whether the students trust their teacher to give them feedback.

Socrates taught students by asking questions and querying the underlying assumptions as well, and was the first to use discussion and the power of speaking to improve students' logical thinking. The power of questioning, according to Socrates, lies not only in questioning others but also questioning ourselves: 'It seems that I am wiser than he is to this small extent, that I do not think I know what I do not know' (*Apology* 21d, trans. Tredennick). Socrates felt that he was wiser only because he knew his limitations in knowledge and his own ignorance.

#### *2.5.2.2 The value of self-generated knowledge*

Socrates believed that students can contribute to the learning process and that the process of learning knowledge was more important than knowledge itself. He believed that anyone,

even an uneducated person, can discover the truth through language under a mentor's guidance (Taylor, 1908). Nowadays, it is not uncommon to find discussion-focused and student-oriented teaching styles in Western universities. Socratic pedagogy can be used to teach students how to think critically, and it can be employed in any disciplines. Socratic pedagogy fosters critical thinking and encourages active engagement (Boghossian, 2003). Students may have a positive attitude to the Socratic educational method, because the discussion-focused and student-centred learning style gives students freedom and makes them feel trusted (Alfonsi, 2008).

#### *2.5.2.3 How Socrates valued trust*

Socrates himself valued trust as an important foundation on which a smooth conversation and a stable relationship are possible. A good example is the discussion between Socrates and a younger man, Theaetetus (Runciman, 1959). Socrates assumes that no young person would trust him, so he uses small-talk to persuade him. In order to remove the younger one's fear and not to damage his confidence, Socrates shares experiences about himself with him and persuades Theaetetus to converse. Sharing a secret is an effective way to build intimacy and trust. Socrates also makes fun of himself and encourages the youth to give his true feelings and opinions (Hansen et al., 1988). In summary, sharing secrets and showing self-humour are useful techniques to build initial trust and facilitate further discussion.

Although some researchers have argued that the purpose of the Socratic method is to humiliate and/or perplex participants (Pekarsky, 1994), it is clarified by others that becoming confused or perplexed is a possible result or a specific stage of dealing with difficult concepts (Boghossian, 2012). Bad educators, who often claim to be followers of the Socratic method as well, frequently humiliate and discourage their students with sharp questioning, and this is harmful to a trusting and respectful student–teacher relationship (Cicero & Tryon, 1989). From this point of view, an educator should be careful in applying this method, and the class should be divided into small groups, which is more effective to build interpersonal trust and develop conversations on the same topic. The number of students involved in the discussion is suggested to be around 30 (Cicero & Tryon, 1989). The dialogical method of interactive learning is the focus of Socratic educational theory;



students are encouraged to face their ignorance and question themselves at a fundamental level (Brogan & Brogan, 1995).

Socratic educational tradition emphasizes the process of generating knowledge and the use of dialectic method, whereas the Confucian style of education focuses on the product. The key differences between these two pedagogies are summarized as follows:

Socrates, a Socratic exemplar, valued private and public questioning of widely accepted knowledge and expected students to evaluate others' beliefs and to generate and express their own hypotheses. Confucius, a Confucian exemplar, valued effortful, respectful, and pragmatic acquisition of essential knowledge as well as behavioral reform. (Tweed & Lehman, 2002; Greenholtz, 2003)

These two educational philosophies have deep influences on high education across the world, and the features and issues with trust in some countries, influenced by their own cultural context, are also discussed.

Contemporary Western education systems are largely influenced by the ancient Socratic philosophy that emphasizes exploring the truth and encouraging critical thinking, respecting individuals. By contrast, Confucian education systems, especially in East Asian countries, are basically developing under the influence of the ancient educator, Confucius, taking the authority of the teacher to a very important place and valuing rules and structures.

#### *2.5.2.4 Western higher education and trust in different countries*

Western higher education originated in medieval universities in Europe and later flourished in North America when the European colonizers set foot on the mainland. Today, higher education takes various forms to serve different purposes for its students, such as general, liberal arts, engineering, performing arts, professional studies, and so on. The development and specialization of higher education have taken place mostly in the United Kingdom, Germany and the United States. Thus, the population of interest in past literature is European and US students.

Universities in the United States have students with diverse backgrounds. To be specific, students come from many cultural, racial, linguistic and social-economic backgrounds. A

dissertation written by DeBoyes (2009) focuses on student trust among African–American students enrolled in predominantly White doctoral programmes. Trust development would encounter difficulties in a climate of racial prejudice and discrimination. It is suggested by previous studies that African–American students have to face greater challenges and racial tension and tend to express lower levels of satisfaction and greater levels of isolation on a White-dominant university campus (Fries-Britt & Turner 2001; Chavous, 2002). A qualitative study was conducted by DeBoyes (2009), based on interviews with eight African–American doctoral students at the University of Denver in Colorado in the United States. Most interviewees expressed a moderate level of trust in the institution; nevertheless, a few claimed that the institution fostered a racial and hostile environment. With these negative perceptions of the institution, trust is extremely difficult to build up. Some interviewees trust their graduate programmes and the faculty’s expertise, as well as their classmates, yet they distrust the institution and its staff (DeBoyes, 2009).

Some researchers have different findings in terms of race and trust in higher education in the United States. For example, it is found that faculty trust is not significantly correlated with race, according to the Higher Education Faculty Trust Inventory, an instrument to measure faculty trust in administrators, colleagues and students (Smith & Shoho, 2007). Faculty members from 32 departments at a south-western US institution participated in the survey by Smith and Shoho (2007); multivariate analysis of variance (MANOVA) and analysis of variance (ANOVA) were used to test the statistical significance. In their study, faculty trust and academic rank (adjunct, assistant, associate and full professors) display an inverse relationship: tenured faculty members are less likely to display trust in campus groups than their untenured colleagues. Their study also demonstrates that minority and non-minority faculty members have no significant difference in the extent of faculty trust in the administrators, colleagues and students. Although race is a critical topic in US society, it does not seem to be an issue when it comes to faculty trust in universities.

Fryberg and Markus (2007) compared cultural models of education in American Indian, Asian American and European American contexts. According to this study, education is highlighted and respected in Asian culture, and education is linked to success and honour. In an American Indian context, being educated is a route to enter mainstream American

society. With regard to the student–teacher relationship, European culture emphasizes autonomy and independent thinking, whereas a Confucian culture involves students’ appreciation and requires teachers to establish a bond with students. In their survey, both American Indian and Asian American express a strong expectation that teachers will build trusting relationships with students, but this is not obvious in the group of European American students. Moreover, American Indian students show much less trust for teachers (Fryberg & Markus, 2007).

In addition, tenured and untenured faculty members are compared to examine their different impact on undergraduate education (Umbach, 2007). In the United States, universities are forced to seek more flexible and less expensive sources of instruction in the context of decline in public trust, decreases in government funding and increases in student numbers. As a result, the number of contingent faculty appointments rise. Due to a feeling of insecurity, these untenured faculty members show a low level of trust and, in turn, their job performance and organizational commitment decline (Pearce, 1993; Kraimer et al., 2005). It is suggested that the US institutions should provide such faculty with more support and training to increase their security, trust, commitment and performance (Umbach, 2007).

The education system in Finland has received plenty of attention in recent decades from researchers and educational policy-makers all over the world. The *Economist* commented that leaders in European government ‘should go back to school’, as ‘Finnish 15-year-olds have the highest level of mathematical skills, scientific knowledge and reading literacy of any rich industrialised country’ (‘Back to School’, 2006). Finland’s practices are a successful example of educational reform. Before the 1970s, the education system had been controlled by the central agencies and teachers were regulated extremely strictly in terms of their daily work. Since the great reforms in education in the 1970s, Finnish educators and policy-makers scrutinized everything, including textbooks, salaries, administration and teacher training. Since the 1980s, Finnish educators have used creative approaches totally different from global education development policies and strategies, such as standardizing education, putting more focus on literacy and numeracy and establishing consequential accountability systems for schools. Finnish education policies

set flexible and loose standards, focus on all aspects of an individual's growth, besides learning and creativity, and build up a culture of trust that values teachers' and headteachers' professionalism (Sahlberg, 2007). A trust-based culture began in the early 1990s. In Finland, the teaching profession has gained great respect and appreciation from the public (Simola, 2005). Furthermore, the education authorities and political leaders believe that teachers, together with parents and their communities, have a deep understanding of how to provide the best education for their youngsters. Teachers and principals are encouraged to participate in school development and decision-making. A comparison of primary schools in England and Finland reveals that a collaborative culture with supportive trusted colleagues is of great importance and directly related to work effectiveness (Webb et al., 2009). The Finnish teachers in their study express a high level of trust of government, the municipality and schools. The teachers in Finland can obtain sufficient support from the government and are satisfied with the curriculum and the operational framework. In contrast, the English interviewees did not perceive so much flexibility, and instead felt under pressure to meet the government's standard agenda.

A few studies explore the issues of trust, control, professional autonomy and accountability in higher education quality assurance in the United Kingdom, such as Hoecht's study (2006), a combination of conceptual framework and empirical analysis. It argues that audit-based quality control does not foster trust or improve learning and innovation. Auditing is increasingly used as a tool to make education institutions accountable, and it provides information and is expected to reduce the risk perceived by the public. Although this policy instrument may be suitable for governments to offer formalized accountability, in higher education it can undermine the motivation of those educators who deliver the best-quality service. Trust is a learning process to create mutual commitment between at least two parties, and a well-functioning trust-based system is more effective than a control-based system (Shore & Wright, 1999; Hoecht, 2006). Hoecht (2006) conducted an empirical study that included interviews with lecturers at a UK business school, and the interviewees reported that they were feeling the loss of their professional autonomy and were less trusted. The author concluded that the current audit-control system addressed educational quality at a rather superficial level.

The German system of high education is to some extent replicated in Austria, Switzerland and the Netherlands. The economy in Germany is dominated by large firms, and management-labour relations are characterized by cooperation. Social capital in German society is characterized by high levels of trust, rooted in the strong traditions of Catholicism and professional organizations. Developed from the Bismarckian apprentice system, the modern education system has strict rules and maintains high quality (Green, 1999). Trust is crucial to organizational cohesion. The federal government has relatively little control over the education system; however, at the *Länder* level it is centralized and tightly regulated. The strong craft traditions and a robust trust-style social partnership together contribute to the sustainability of German education, and its higher education has an excellent reputation around the world.

Therefore, in Western higher education systems trust is built upon the same traditional educational philosophy as Socrates' belief in prompting students' own hypotheses of knowledge, group discussion, the acquisitive style of learning and the value of truth of knowledge. On the other hand, Western countries have totally different educational systems, where institutions and faculty have more freedom to design the curriculum and activities. Besides, Western education system face challenges such as racial discrimination and social-political issues among universities in several regions, resulting from the diverse cultural backgrounds of students and the intricate social-political history and discrepancies, as in the United States. Teacher-student relationships are influenced to a large extent by this environment; thus, the establishment of mutual trust needs to be paid more attention.

## **2.6 Conclusion**

From the above literature, it seems that each country has been adjusting its educational policy to adapt to economic change. There are improvements and challenges associated with educational policy adjustment in each country. Generally speaking, Asian countries are influenced by Confucian traditional values, and central government plays an important leading role and provides detailed guidance to higher education. By contrast, Western

countries have differing educational systems, as the institutions and faculty have the freedom to design their curricula and activities.

Knowing that trust between teachers and students plays a critical role in students' academic achievement and well-being, faculty members of both education systems still have to overcome some obstacles, and faculty's trust in the organization can be affected by key factors, including the cultural values of the organization, its size and the socioeconomic status of the students. Finland has set a good example by building trust among faculty members, institutions, government, students and parents, but other Western countries face challenges.

From this thorough look into their origins, it is evident that education systems in Western and Eastern cultures have distinctive cultural theoretical orientations. Past research has investigated trust and its development in the teacher–student relationship in Western societies. Previous studies about teacher–student relationships focus on two main aspects. The first is introspection regarding current teacher–student relationships, pointing out the weaknesses and potential dangers. The second is the suggestions to improve the current relationship. However, it is evident that there are few studies that focus on trust in Eastern education systems or use Confucian notions of trust. Very few studies have discussed the teacher–student relationship through an examination of trust and compared how it is practised differently in Eastern and Western societies. The uniqueness of this dissertation is its reference to Confucian notions of education and trust as a basis to analyse the impact of the cultural background on the various kinds of trust in the teacher–student relationship. It is believed that, by directly comparing the cultural influences on the teacher–student trust in the region of Hong Kong and United Kingdom, the present study has the potential to contribute to the literature in this field. The mechanism of how the cultures and traditions in the East and the West impact on the interaction between students and teachers and how they build trust between each other will be revealed in the coming chapters.

### **3 Methodology**

In order to research teacher–student relationships in universities from the perspective of trust, mixed methods will be used, including qualitative and quantitative methods.

#### **3.1 Justification for the paradigm and methodology**

The current study aimed to compare trust in teacher–student relationships in Eastern and Western higher education systems and to determine factors of trust from the perspectives of both the teachers and students.

##### **3.1.1 Comparative study**

Comparison is the basis of understanding things. Similarities and differences between them distinguish the most common way of thinking. Comparative study has been widely used in various fields of scientific research and is also an important educational research method. In 1996, Teichler (1996) explained the notion of comparative higher education research, which means dealing with:

research addressing phenomena of higher education in more than one ‘culture’, ‘society’ or ‘nation’ systematically or in a single one in comparative perspective. It pursues the typical logic of comparison, which is universal for research striving to identify common elements and differences as well as to test hypotheses on causal relations. (Teichler, 1996; Reale, 2014)

In the comparative study of trust between teachers and students, an investigatory method is adopted that takes in both subjectivism and objectivism. From the methodological viewpoint, having both a closed-ended measurement and an open-ended observation or interview is the best choice to investigate trust between teachers and students.

Based on this methodology, a particular technique that focuses on the subjective and objective dimensions of trust can be used in the investigation. Questionnaires are constructed with two main features: a Likert scale and rankings. The questionnaire is the best choice for the following reasons: firstly, its multiple-choice format could provide closed-ended objectivity, which is convenient to measure and map the landscape of interviews. Secondly, short questions (such as ‘Describe a certain happy experience with

your teacher/student') could provide open-ended information that conforms to the subjective nature of trust. Thirdly, the questionnaires could avoid the Hawthorne effect by adopting non-face-to-face interaction. In addition, the use of Likert scales allows participants to respond with the degree of their agreement, and this makes answering the questions easier. Besides, a Likert scale is efficient as the responses are quantifiable and susceptible to statistical analysis and computation. Lastly, one thing should be kept in mind: the questionnaires tap into students' and teachers' trust in unconscious and indirect ways. The goal of this indirectness is to obtain the most authentic feedback on teacher–student relationships. Thus, a questionnaire should not ask a direct question, such as 'Do you trust your teacher/student', because that would be a violation of the unconsciousness of trust.

A comparative study of Eastern and Western educational philosophies can help to combine the best elements to form a new ideology of teacher–student trust relationships for educational purposes. In order to collect enough information for comparison, the researcher determined to use questionnaires to obtain first-hand information. Based on the objectives of this proposal, the researcher first designed the questionnaire used in this study to understand the current situation of the teacher–student trust relationship in Eastern and Western higher education respectively, from such factors as interpersonal trust, expertise, the importance of the teacher–student relationship, the class atmosphere, and so on. The questionnaire surveyed both teachers and students in Hong Kong Polytechnic University and Middlesex University, London, respectively.

The researcher issued 300 questionnaires to each university randomly in the form of an online questionnaire, an email or a face-to-face interview. After implementing the survey, the researcher used Excel to record and SPSS software to analyse the data collected and then obtain the final results. Based on the findings, the researcher further analysed the differences between the Eastern and Western teacher–student trust relationship in detail.

The questions mainly focus on the study's ideologies, students' and teachers' roles and their personalities to examine the discrepancies in terms of building trust between Western Socratic and Eastern Confucian education philosophy settings. For the study ideologies,



questions were designed to examine students' preference for learning styles such as self-learning, critical learning or group learning versus having a teacher to convey the knowledge. The teachers' role is implanted in the questions to investigate students' inclination for an authoritative, parental figure or academic friendly figure (for example, students in Western universities are thought to be more favourably inclined to teachers with an open mind who interact more, academically, with them). Teachers' personalities and characteristics are considered in the literature review to be one of the most important factors of interpersonal trust. Thus, items that reflect the personalities of teachers and students are used, as well. The student questionnaires aim to provide multi-layered results on the educational reflection of the cultural background in both Hong Kong and the United Kingdom.

## **3.2 Research design**

### **3.2.1 Research design rationale**

The key challenge was to disentangle two sets of comparisons: first, how do the students' perceptions of the teacher–student relationship and personal trust differ from those of their teachers?; and second, how do the HK patterns in the students' and teachers' perceptions on the mutual relationship and trust differ from those in the UK context? As a result, the questionnaire focused on similar topics from both the students' and the teachers' perspectives.

#### *3.2.1.1 Questionnaire design rationale*

The questionnaire was designed to collect information for a comparative study of attitudes in a teacher–student relationship from the perspective of trust in HK and British universities. Two versions of the questionnaire were designed, targeting students and teachers respectively. The first targets the college student population. It mainly focuses on college students' perceptions of trust and the teacher–student relationship, and the factors that influence that trust. The second version of questionnaire targets college instructors, concentrating on their perspective of trust and mentorship between the teacher and the student.

Since the survey was conducted in both HK and UK settings, the questionnaires were delivered bilingually (initially designed in English and then translated into Cantonese) with the same questions, to be consistent between the source and the target languages (Harkness et al., 2011). This is a crucial step to make sure that the questions and items can be compared one-by-one across sub-datasets and analysed with full scalar equivalence (see, for example, Oppenheim, 1968).

The questionnaire has three forms of survey instruments, including Likert scales and rankings interviewees (Foddy, 1994). Considering that the teacher–student relationship of trust is not unidirectional between the student and teacher population, it intentionally posts similar open-ended questions in both sections. Basic demographic information of the sampled respondents, such as age and gender, is requested as starting questions in the questionnaire. Interviews of teachers and students also helped to design the questionnaire.

#### *3.2.1.1.1 Student questionnaire*

In the quantitative research part, questionnaires were distributed to students. First, 20 first-year students of higher education in Hong Kong were piloted as subjects for the student questionnaire. The questions were in both English and Cantonese to ensure that students clearly understood them, and investigated how students perceived their teachers in the university. The Student Union of Hong Kong Polytechnic University asked students to complete the pilot questionnaire and then the researcher collected the responses. Then, the questionnaires were adjusted, and a final version was submitted through hard copies to students in both Hong Kong and the United Kingdom.

The student section begins with a five-point Likert scale for 27 items. These items were designed to reflect the indicators of trust identified in the literature review, discussed by multiple theorists from multiple aspects. First, trust was viewed as personal expectations, where people perceive trust as a risk that they take and calculate their gain to be greater than their loss. Second, trust was viewed as interpersonal relations. Similar to the first point, trust was perceived as a vulnerability to the actions of another person in relationships. Third, trust was perceived as a social mechanism. Sociologists viewed trust

as a collective social exchange beyond the level of individual relationships and focused more on the perspectives of institutions and societies.

In the process of questionnaire design, all three aspects (personal, interpersonal and institutional) were considered. First, the following questions were asked to assess the personal expectation aspect of trust:

Q1. I care very much about the interpersonal relationship between me and my teachers;

Q10. It is not necessary to build trust between me and my teachers;

Q23. Teacher–student relationship has an influence on my academic result;

Q24. Teacher–student relationship has influence on my mood; etc.

These questions were asked to assess students' personal attitudes and ideas about their relationship with their teachers and trust. Second, some questions were asked to assess the interpersonal relational aspect of trust, such as:

Q3. The expertise of a teacher is very important;

Q8. Teachers' primary role is to convey knowledge to students;

Q14. My teacher would hate me if I made him/her realize his/her mistakes in class in front of other classmates;

Q5. My teacher should always manifest a high moral standard model; etc.

These questions took an interpersonal perspective and asked about students' ideas on how their teachers perceive their relationship. Third, other questions asked students to think at an institutional level and decide on the rights and wrongs in the teacher–student relationship. For example:

Q17. Versatile teacher deserves more respect and trust;

Q21. Racial discrimination and other scandals of the university will reduce my trust towards the faculty; etc.

The complete list of 27 questions may be found in Appendix C.

A technique for the measurement of attitudes in ordering format, a Likert scale is a psychometric response scale widely used in questionnaires and surveys to gather participants' preferences for a particular statement or multiple statements (Oppenheim, 1968). To generate discernible responses for each item, the scale has five points in this survey, ranging from 'strongly agree' to 'strongly disagree', with 'uncertain/not applicable' in the middle. The respondents were required to indicate their degree of agreement with each given statement on the teacher–student relationship or class dynamics. Considering that the questionnaire is for college students and teachers, the statement of each item in the Likert scale is concise and relatively easy to read and complete.

A further note on the choice of the five-point scale is that, in the literature, there has been continuing argument over the use of different point scales (e.g. Sharp & Howard, 1998). Although an odd-numbered scale is always suggested, to allow respondents to choose a neutral point and to make choices on either the positive or the negative side, there is debate on whether to use a five-point scale or a seven-point scale in bipolar (measured in two directions) measurements. Some researchers suggest that the five-point scale is more valid and reliable than the seven-point in agree-disagree questions. They point out that greater method effects appear when the number of response categories is higher, which will lead to a decrease in the overall quality and reliability of the measurement (Revilla, Saris & Krosnick, 2013). Because of the potential measurement bias caused by the seven-point scale and the bipolar nature of the questions, the five-point scale is used in this survey to maximize the reliability of measurements.

The Likert scale was chosen because the attitude questions can be close to each other. The scale itself can be compact, and the questionnaire will be clear and concise yet reflect the methodological considerations of how to analyse the quantitative data. For example, factor analysis or cluster analysis can be undertaken on the basis of the items in the question. The correlation coefficients of these items can also be easily checked to see whether they are measuring similar content, as the items are designed to have the same

scale and follow the same themes. For this purpose, I included only 27 items on the scale so that they can properly indicate what it is intended to measure and, at the same time, so the practical analyses would not be overwhelmed by the large number of items. For inter-question reliability, these items also serve as a cross-reference to other questions in this section, as some of them measure similar aspects of the teacher–student relationship, such as Items 18 and 20, on this scale.

The next part takes a ranking format. The question asks participants to identify the essential characteristics that students trust most in their teachers. Therefore, it asks the respondents to choose as many as possible of the characteristics that they think influence the establishment of trust towards their teachers, from the list provided, and directly rank them by their relative significance in building student–teacher trust. To make the list meaningful, all possibly significant characteristics of a teacher that can matter to a student were included, such as intelligence, expertise, moral standards, teaching style, and so on, with an open option in the list to make it logically complete. Using such a choosing-and-ranking design, the survey can not only recognize the most important factors that contribute to students’ trust to teachers but can also rank the listed characteristics based on the percentage of each response. It is particularly useful to closely examine this question to compare similarities and differences between the perceptions of HK and UK students on ‘What is meant by a good teacher?’

It needs to be pointed out that sometimes it is impossible to design items with an isolated purpose. Many of the items are designed with a single purpose but could also be used for other intentions. For example, Item 11 in the student section is to examine students’ attitudes towards a teacher’s teaching style, but it can also be used to examine the students’ learning styles.

The questionnaire designed for HK students was translated from that given to the British students. The questions are bilingual with different elements. Although Confucian-oriented education and its philosophy in terms of trust between students and teachers are deeply rooted in East Asia, the impact of Western education philosophy, which is the Socratic-based philosophy discussed here, cannot be overlooked and therefore needs

further examination of how it affects traditional education values in East Asia. Based on these findings, many items are designed to see if learning style, teachers' role and other issues affect the establishment of trust within traditional values. For example, Items 22, 25, 26 and 27, with Likert scales, were designed to examine how the interpersonal relationship between students and teachers, in terms of frequency of communication, the degree of intimacy of the relationship and parental figures in communication, might affect trust-building cross-culturally.

#### *3.2.1.1.2 Teacher questionnaire*

The teacher section consists of a five-point Likert scale with eight items. Teachers were asked whether a certain attribute of the student would influence their trust in him/her. The five-point scale ranges from 'strongly agree' to 'strongly disagree'. It is an ordinal measurement that has only one direction. In a similar vein, three open-ended questions are designed to produce responses to reflect the teachers' perceptions of what teacher–student trust is, the affecting factors and how to improve it, and another open-ended question solicits description of a most trusted student, in teachers' eyes.

### **3.3. Interview design rationale**

In the interview part, student perceptions of teacher–student trust were investigated through in-depth interviews of first- and final-year students in both universities. Since the constitution of trust in higher education is not yet clear, factors surrounding the notion of trust from the literature (e.g. interpersonal relationship) were used to craft the questions. The relevance of each factor to trust is further explored in the analyses. This part discovers the trust relationship of students and teachers within the institution, how they trust and notions of trust, Confucian trust and what trust is. Two groups of students responded to the interview, one from Hong Kong and the other from the United Kingdom. In this part, the change in students' views is examined as they progress from the first to the final year at university.

Interviews were conducted in both Hong Kong and the United Kingdom to establish HK and UK students' and teachers' perceptions of university teacher–student trust. The investigation was conducted through semi-structured interviews by Skype to obtain

explicit information. The semi-structured interview was adopted for this research for a reason. We know that, in a structured interview, interviewees are not allowed to digress. As a result, new information is not provided by interviewees. However, sometimes students or teachers may have more information for the interview on trust in the relationship between teachers and students, apart from what was constructed in advance. The interviews were conducted by Skype partly so that more information could be obtained than from a simple voice recording. The 10 interview questions were all recorded for later use, in sampling groups divided by country and identity. They established both students' and teachers' perceptions of trust under the different ideologies. The four groups were the HK students, UK students, HK teachers and UK teachers.

The focus group in this investigation comprised the HK and UK students who took part in the semi-structured interviews. The interview allowed them to provide new information for the study, such as new ideas and thoughts which could be used for analysis. Moreover, the outcome of a good teaching procedure depends on the students, so it was crucial to find out the students' perspective of trust in the teacher–student relationship.

### **3.4 Summary**

The design of the current study aims to explore the teacher–student relationship based on trust theory, and the results will be contextualized and discussed in future chapters under existing educational theories. Taking trust as a management mechanism, the current study uses mixed methods, including quantitative analyses of questionnaires and qualitative analyses of semi-structured interviews. It explores the trust between teachers and students in Hong Kong and the United Kingdom for a future harmonious higher education world, balancing freedom and intervention to achieve a win-win symbiosis between the two parties.

## **4. Results**

The results section is divided into two sections: student and teacher. Both quantitative and qualitative methods were used in the two sections. The quantitative part analysed data collected from the student and teacher surveys to compare and contrast critical factors in the student–teacher relationship in Hong Kong and the United Kingdom, and the qualitative part analysed data collected from interviews to provide further insights from participants’ discourse.

All data from students and teachers were collected in two regions: Hong Kong and the United Kingdom, representing Chinese and Western cultures. For the students’ part, first-year and final-year students were given the survey. Therefore, there were four student groups: HK first-year students, HK final-year students, UK first-year students and UK final-year students. There were 293 (20 responses were obtained from the pilot study and 273 from the main survey), yielding 117, 64, 38 and 74 respondents for those four groups respectively. For the teachers’ part, 20 teachers in Hong Kong responded to the survey and 16 teachers in the United Kingdom. Interviews served as validation and a supplement to the surveys. Four students and four teachers took part in the interviews.

### **4.1 Analyses of student questionnaire and interviews**

#### **4.1.1 Preprocessing of questionnaire Part A**

There were 27 questions in Part A of the questionnaire (see Appendix C) for students. The questions were on different aspects of teacher–student relationships. One-by-one examination of each question could be tremendously laborious and disorganized. Therefore, an important step before formal analysis was to simplify the questions, or statistically to reduce the dimensions of the scale.

The questions were designed to reflect six aspects of teacher–student relationships: students’ attitude to the importance of the teacher–student relationship; students’ attitude to the importance of teachers’ expertise; students’ attitude to the equality/authority of teachers; students’ expected closeness of their relationships with teachers; students’ preference for class atmosphere; and students’ trust in teachers in interpersonal



relationships. The reliabilities of the questions on each aspect were tested using the pilot study data.

*Students' attitude to the importance of the teacher–student relationship*

Four questions were designed to reflect students' attitudes to the importance of the teacher–student relationship:

Q1. I care very much about the interpersonal relationship between me and my teachers. (我很在意我和老師們的關係).

Q10. It is not necessary to build trust between me and my teachers. (建立和老師們的信任不是特別需要).

Q23. The teacher–student relationship has an influence on my academic results. (師生關係的好壞對我的學習成績有影響).

Q24. The teacher–student relationship has an influence on my mood. (師生關係的好壞對我的心情有影響).

Among them, Q10 was inversely coded: the higher the participants' score on the four questions, the more important they thought the teacher–student relationship.

Those four questions showed slightly less than moderate reliability, with average intra-class correlations of 0.474.

*Students' attitude to the importance of teachers' expertise*

Four questions were designed to reflect students' attitudes to the importance of teachers' expertise on academia/teaching:

Q3. The expertise of a teacher is very important. (老師的學術專業程度非常重要).

Q4. The intelligence of a teacher is very important. (老師的智力非常重要).

Q7. Teachers should not interfere in students' private life. (老師不應該干涉學生的個人生活)

Q8. Teachers' primary role is to convey knowledge to students. (老師的首要任務是教與學生知識).

Q17. Versatile teachers deserve more respect and trust. (多才多藝的老師應該受到更多的尊重).

These questions reflected how students value teachers' expertise: the higher the participants' score on the five questions, the more they valued their expertise. The five items indicated high reliability, with average intra-class correlations of 0.729.

*Students' attitude to the equality/authority of teachers*

Five questions related to students' attitude to the equality/authority of teachers:

\*Q2. A good student will often ask teacher questions. (好學生會常常問老師問題).

Q11. I often raise my concern and questions to my teacher in class. (我常常在課堂上向老師提出疑問).

Q12. I would confront my teacher in class if I think his/her explanation of a certain point is wrong. (當我認為老師錯了，我會直接指出他/她的錯誤).

Q13. I don't think confronting my teacher directly with regard to the teaching content in class will humiliate him/her. (我不認為指出老師的錯誤會讓老師難堪).

Q14. My teacher would hate me if I made him/her realize his/her mistakes in class in front of other classmates. (老師會因為我指出錯誤而討厭我).

Q18. Teachers are authoritative; I have to be humble in front of them to show my respect of them. (老師有師嚴，我應該在老師面前表達尊卑).

Q20. I would rather consider my relationship with my teachers as equal. (我認為我和老師的地位是平等的).

These six questions reflected students' expectations of the equality/authority of teachers and reflected their tendency or otherwise to confront them face-to-face.

Although both Q2 and Q11 were designed to measure students' attitude to asking questions, Q2 suggested their objective attitude towards question-asking, while Q11 suggested their subjective experience towards teachers' authority. In the pilot study, students who scored high on Q2 did not necessarily score high on Q11; the explanation could be that students who thought question-asking was a good learning behaviour would not necessarily see themselves as good students. Due to the negative reliability between the two questions, researchers counted only students' subjective experience, which was in Q11, in the final analyses, for the reason that Q2 would not fully represent students' personal attitude as much.

Students who gave higher scores in the above six questions showed a tendency to prefer an equal teacher–student relationship. By contrast, students who gave lower scores in these questions showed respect for teachers' authority. Among them, Q14 and Q18 were reversely coded.

Six questions (Q11, Q12, Q13, Q14R, Q18R and Q20) reflected a relatively low reliability of an average intra-class correlations of 0.056.

#### *Students' expected closeness of their relationships with teachers*

Three questions were to reflect students' expected closeness of their relationship with teachers:

Q5. My teacher should always manifest a high moral standard model. (我的老師應該是道德的楷模).

Q6. I am inclined to teachers with parental characteristics. (我會更喜歡像父母親一樣的老師).

Q19. Being considerate is important for teachers. (細心體貼對於老師來說很重要).

Q21. Racial discrimination and other scandals of the university will reduce my trust in the faculty. (種族歧視的老師會影響我對其所在教育機構的信任度).

These four questions reflected students' expectations on values regarding closeness to their teachers. The higher the participants scored in the four questions, the closer relationships they expected from their teachers. The four questions indicated a moderate reliability, with average intra-class correlations of 0.537.

*Students' preference about class atmosphere*

Three questions were to measure students' preference for class atmosphere:

Q9. I enjoy a relaxed and free atmosphere in class. (我喜歡自由散漫的課堂).

Q15. I enjoy group/whole-class discussion in class. (我喜歡課堂的團隊討論).

Q16. I think group discussion is effective. (我認為團隊學習很有效率).

The three questions measured students' preference for a free, less-rigid class atmosphere. The higher participants scored on the questions, the more they preferred a less-structured class. Those questions exhibited moderate reliability, with average intra-class correlations of 0.591.

*Students' trust in teachers in interpersonal relationships:*

Students' trust in teachers in interpersonal relationships was captured by the behaviours described in the following four questions:

Q22. I will initiate communication with teachers. (你會主動與老師交流).

Q25. The relationship between me and my teachers is great. (我與老師的關係非常好).

Q26. I often seek advice from my teachers. (我會常常向老師尋求建議).

Q27. I am willing to communicate more with my teachers in my leisure time. (我願意在課餘時間和老師交流).

Behaviours such as communication with teachers and advice-seeking reflect students' willingness to sustain good relationships with teachers and their trust in teachers in interpersonal, non-academic settings. The above four questions indicated a high reliability, with average intra-class correlations of 0.837.

To statistically examine the validity of those six categories, confirmatory factor analysis was employed. The model is specified as in Figure 1:

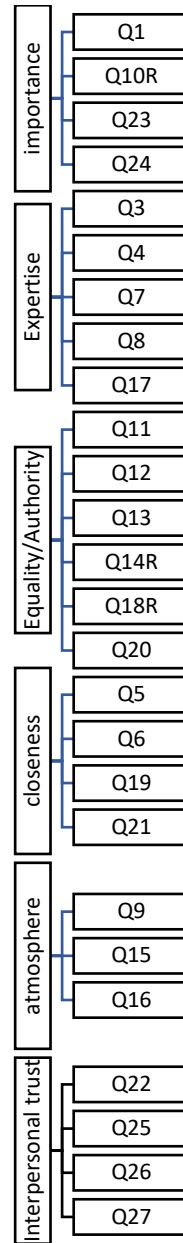


Figure 1: Confirmatory analysis of model

There are six factors in the model to show the importance of, in turn: relationships; expertise; authority; closeness; atmosphere; and interpersonal trust. Each of the factors corresponded to several questions as contributing variables. The variance of each factor was set to one, to avoid model under-specification.

The indices that measure the overall fit of the model are shown in Table 1.

Table 1: Indices to measure the overall fit of the model

<b>Fit indices</b>	<b>Value</b>
Goodness-of-fit index	0.8523506
Adjusted goodness-of-fit index	0.8104594
RMSEA index	0.0675673
Bentler-Bonett NFI	0.7470334
Tucker-Lewis NNFI	0.8200945
Bentler CFI	0.8471159
Bentler RNI	0.8471159
Bollen IFI	0.8508719
SRMR	0.0833247
AIC	567.6639
AICc	489.1352
BIC	-729.0599
CAIC	-944.0599

The overall goodness-of-fit was 0.852, and the adjusted goodness-of-fit which adjusted for the complexity of the model was also above 0.8, suggesting a relatively good fit for the model. That means that the structured model fitted the variance-covariance matrix of the 26 questions well, and the six categories were statistically solid.

In summary, through the statistical validation, six underlying constructs of the Part A of the student questionnaire were identified. These are the importance of:

1. Importance, which measured students' attitude to the importance of the teacher–student relationship. The higher the importance score, the more the students thought the teacher–student relationship was important.
2. Expertise, which measured students' attitude to the importance of teachers' expertise in academia/teaching. The higher the expertise score, the more the students thought teachers' expertise in academia or teaching was important.
3. Equality/authority, which measured students' attitude to an equal teacher–student relationship and teachers' authority. The higher the equality/authority score, the

more the students wished for an equal teacher–student relationship, and the less they respected teachers’ authority.

4. Closeness, which measured students’ expected closeness with their teachers. The higher the closeness score, the more the students expected to be close to their teachers.
5. Class atmosphere, which measured students’ preference for an active and efficient class atmosphere. The higher the class atmosphere score, the more the students preferred an active and efficient class atmosphere.
6. Interpersonal trust, which measured the degree of students’ trust in teachers, exhibited by their interactions with teachers. The higher the trust score, the more the students trusted their teachers.

Responses of questions for each construct were averaged to generate a mean score in the pilot study and in both phases of the HK and UK student responses.

The means and standard deviations of those six constructs in the study are given in Table 2:

Table 2: Descriptive statistics of the six constructs

Construct	Mean	Std. deviation
Importance	3.65	0.57
Expertise	3.88	0.53
Authority	3.22	0.38
Closeness	3.59	0.50
Atmosphere	3.47	0.79
Trust	3.63	0.60

#### **4.1.2 Impacts of culture and year of attendance on trust (Part A)**

One of the core questions of the present study is to specify the nature of cultural influence on teacher–student trust. This question is tackled in this section by exploring the



difference in students' trust in teachers for two cultures, Hong Kong and the United Kingdom, representing Eastern and Western culture. In addition, the effect of the year of attendance on students' trust in teachers was investigated. This section focuses on the results of Part A of the student questionnaire.

All answers to questions belonging to the same group were computed to generate a mean to represent what each student thought in the six categories. Missing data do not count in the analysis.

#### *4.1.2.1 Effects of culture and year of attendance on importance of relationship*

The effects of culture and the year of attendance on students' attitudes to their relationship with teachers were tested statistically. There are two independent variables in this question, the culture (Hong Kong versus the United Kingdom) and the year of attendance (first-year versus final-year students); both are categorical variables. Meanwhile, the dependent variable, students' attitude to their relationship with teachers, is an equal-interval variable (assuming that the 5-point Likert-scale score is equal-interval). Therefore, the ANOVA method is suitable for statistical testing of this question.

Students were classified into four groups: HK first-year students, HK final-year students, UK first-year students and UK final-year students. The means of the scores for trust in teachers in the four groups are shown in Figure 2.

The effects of culture and the year of attendance on students' attitude to the importance of teacher–student relationship were investigated, and ANOVA was used for statistical testing.

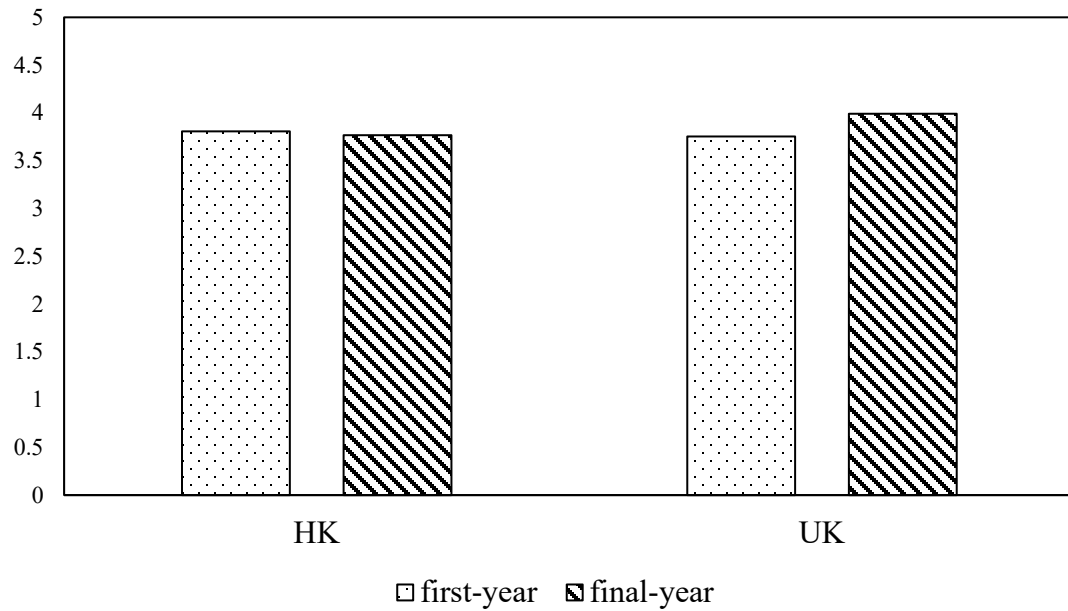


Figure 2: Means of importance scores in the four groups

As we can see, the UK students tended to think their relationships with teachers are more important than did the HK students. The direction of the effect of the year of attendance was different for the UK and HK students: the final-year HK students tend to think their relationship with teachers is less important than the first-year HK students, while the final-year UK students put a visibly higher value on their relationship with teachers than the first-year UK students.

For the result of ANOVA, the main effect of culture was not significant ( $F(1,291) = 1.168$ ,  $p = 0.281$ ). The main effect of the year of attendance was found to be not significant ( $F(1,291) = 1.570$ ,  $p = 0.211$ ). The interaction between culture and the year of attendance was not found to be significant ( $F(1,291) = 3.213$ ,  $p = 0.074$ ).

Although some differences were observed in the graph, the effect was not statistically significant.

#### 4.1.2.2 Effects of culture and the year of attendance on equality/authority

An important issue in the present study concerns the influence of the year of attendance and culture on students' attitude to the equality/authority of teacher. Similarly, ANOVA

was employed to test the significance of the effects of culture and the year of attendance on students' attitude to the authority of teachers.

The following plot in Figure 3 displays the means of authority scores for the first-year HK students, the final-year HK students, the first-year UK students and the final-year UK students.

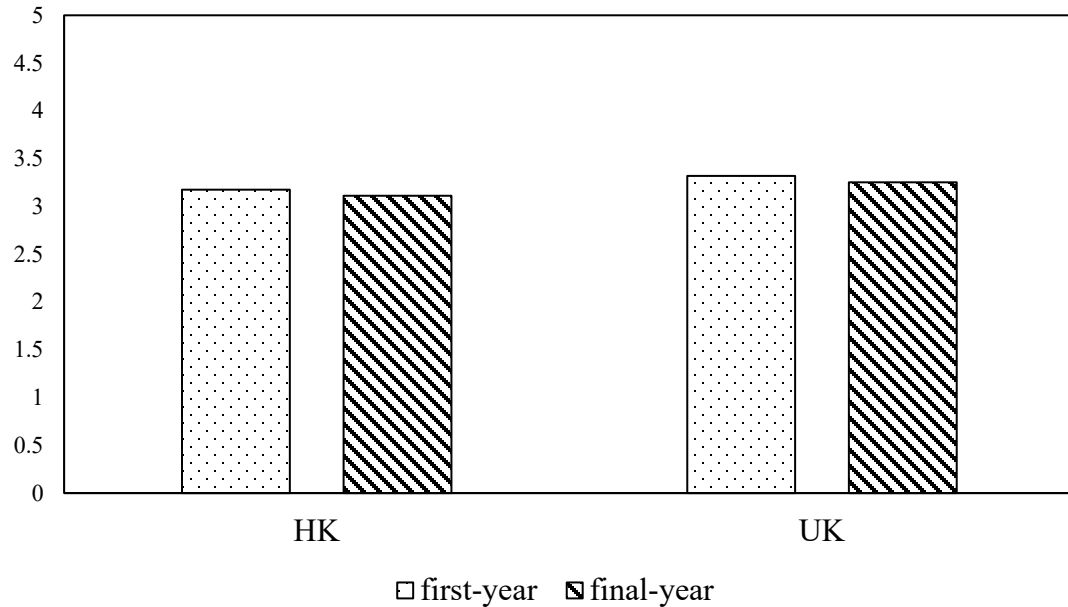


Figure 3: Means of authority scores in the four groups

The lower the score in responses to questions regarding the equality/authority, the more the students showed respect for their teachers. In general, the UK students scored more highly for equality/authority, meaning that, compared to the HK students, the UK students tended to show less respect for teachers' authority. The pattern of the year-of-attendance effect was the same for the HK and UK students: final-year students showed more respect for teachers' authority than first-year students.

In ANOVA tests, the main effect of culture (Hong Kong versus the United Kingdom) was significant ( $F(1,291) = 5.922, p = 0.016$ ). The main effect of year of attendance (first year versus final year) was not significant ( $F(1,291) = 1.243, p = 0.266$ ). Neither was the interaction between culture and the year of attendance significant ( $F(1,292) = 0.004, p = 0.951$ ).

To conclude, although differences were observed concerning the year of attendance and its interaction with culture, only cultural difference was statistically significant to students' attitude towards equality with teachers and their respect for teachers.

#### 4.1.2.3 Effects of culture and year of attendance on expertise

Another assumption in the present study is that students from different cultures and at a different stage of their study may have different expectations or attitudes towards teachers' expertise. Similarly, ANOVA was used to explore the effects of culture and the year of attendance on students' attitudes towards teachers' expertise.

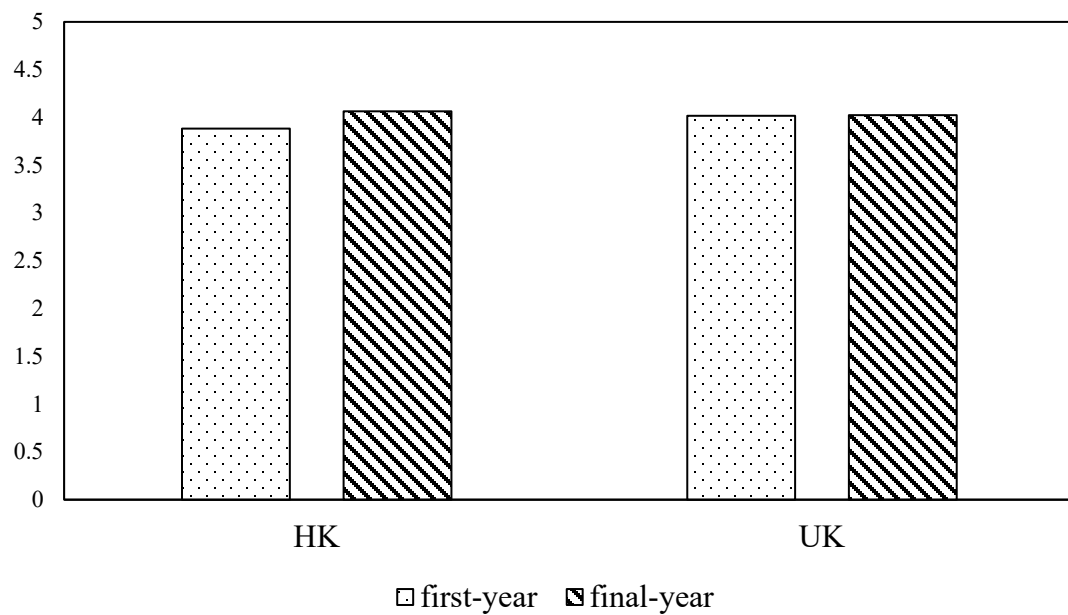


Figure 4: Means of expertise scores in the four groups

As we can see, the UK students tended to put slightly more value on teachers' expertise on academia/teaching than the HK students, in general. There is a similar pattern for the effect of the year of attendance on both the HK and UK students: the final-year students' expectations of the importance of teachers' expertise were higher than the first-year students.

For the result of ANOVA, the main effect of culture was not significant ( $F(1,291) = 0.618$ ,  $p = 0.432$ ). The main effect of the year of attendance was found to be not significant

( $F(1,291) = 2.249, p = 0.135$ ). The interaction between culture and the year of attendance was not found to be insignificant ( $F(1,291) = 1.941, p = 0.165$ ).

#### 4.1.2.4 Effects of culture and year of attendance on classroom atmosphere

The effects of culture and the year of attendance on students' attitudes to the importance of teacher–student relationship were also investigated, and ANOVA was used for statistical testing.

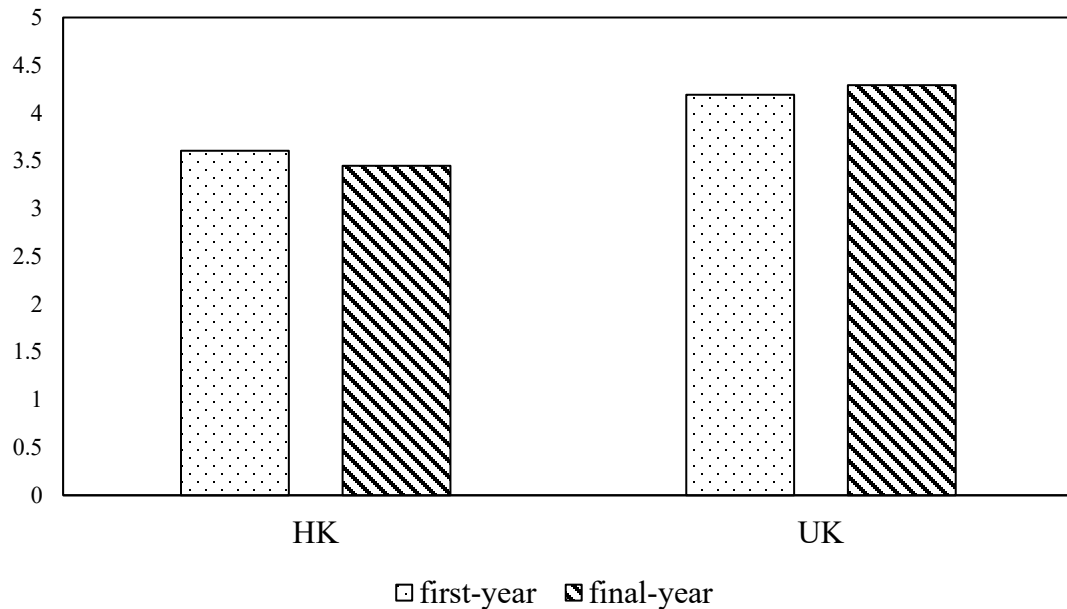


Figure 5: Means of class atmosphere scores in the four groups

As we can see, the UK students tended to prefer a free classroom atmosphere and group discussions more than the HK students did. The direction of the effect of the year of attendance was different for the UK and HK students: the first-year HK students tended to like free classroom settings more than the final-year HK students, while the final-year UK students preferred a free classroom atmosphere more than the first-year UK students.

Results using ANOVA showed that the main effect of culture was significant ( $F(1,291) = 73.452, p < 0.001$ ). The main effect of the year of attendance was not found to be significant ( $F(1,291) = 0.115, p = 0.734$ ). The interaction between culture and the year of attendance was not found to be significant ( $F(1,291) = 2.331, p = 0.128$ ).

#### 4.1.2.5 Effects of culture and year of attendance on trust

The effects of culture and the year of attendance on students' trust in teachers were investigated.

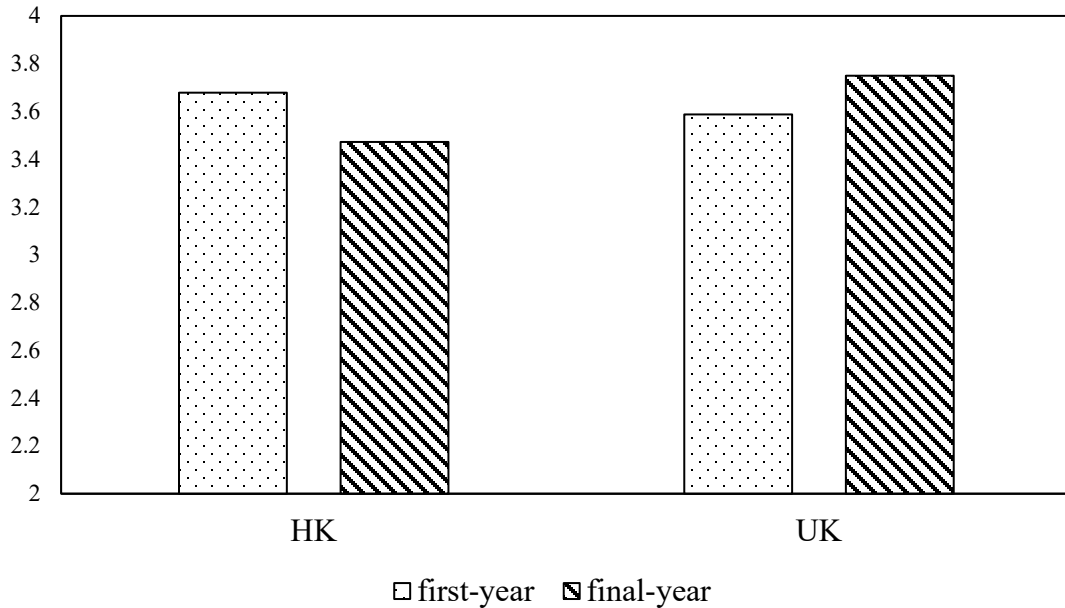


Figure 6: Means of trust scores in the four groups

In general, students' trust in teachers was higher for the UK students than the HK students. In Hong Kong, the final-year students' trust in teachers was slightly lower than first-year students. However, in the United Kingdom, the trend was reversed. In other words, the final-year UK students' trust in teachers was slightly higher than that of the first-year UK students.

The ANOVA analysis suggested that the main effect of culture was not significant ( $F(1, 291) = 1.175, p = 0.279$ ), meaning that the difference in trust between HK and UK students was not statistically significant. The main effect of the year of attendance was also not significant ( $F(1, 291) = 0.068, p = 0.794$ ), meaning that the year of attendance did not have an effect on students' trust in teachers, in general. Finally, the interaction between culture and the year of attendance has a significant effect on students' interpersonal trust in their teachers ( $F(1, 291) = 4.641, p = 0.032$ ), suggesting that students in the final year

of one culture will have different attitude to trust than students in the first year of another culture.

#### 4.1.2.6 Effects of culture and year of attendance on closeness

The effects of culture and the year of attendance on closeness were finally investigated.

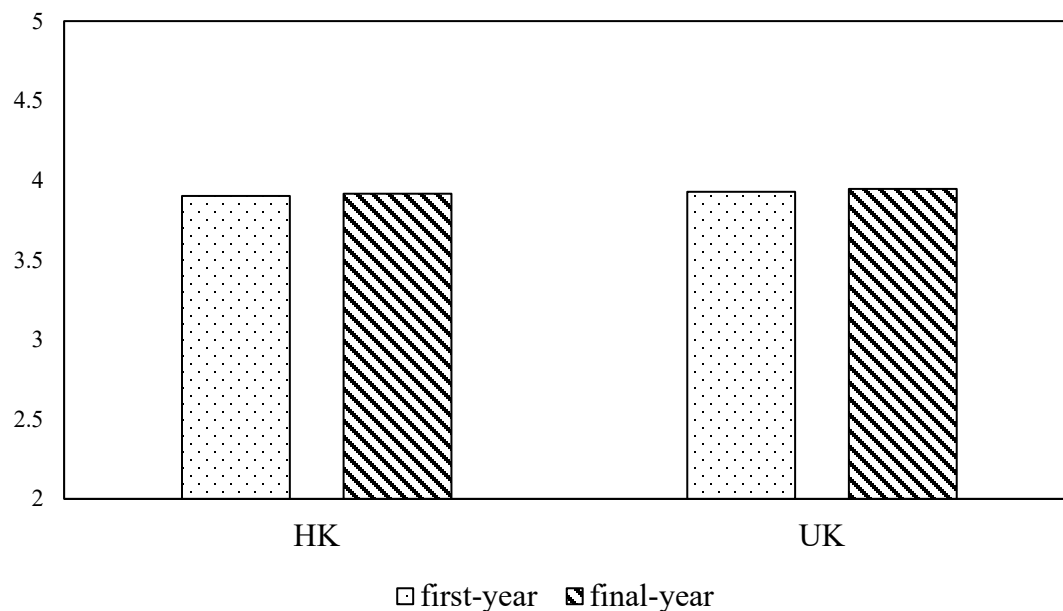


Figure 7: Means of closeness scores in the four groups

In general, there is no apparent difference in students' closeness with teachers between Hong Kong and the United Kingdom: in Hong Kong, the final-year students' closeness with teachers was slightly higher than the first-year students, and in the United Kingdom, the final-year students' closeness with teachers was also slightly higher than that of the first-year students.

The ANOVA analysis suggested that the main effect of culture was not significant ( $F(1, 291) = 0.175, p = 0.676$ ), meaning that the difference in closeness between the HK and UK students was not statistically significant. The main effect of the year of attendance was also not significant ( $F(1, 291) = 0.065, p = 0.799$ ), meaning that it did not have an effect on students' closeness with teachers, in general. Finally, the interaction between culture and the year of attendance does not have a significant effect on students' closeness with their teachers ( $F(1, 291) = 0.001, p = 0.973$ ), suggesting that students in the final

year of one culture will not have any different closeness with their teachers than students in the first year of the other culture.

#### **4.1.3 Impacts of culture and the year of attendance on trust (Part B)**

Both Part A and Part B of the student questionnaire involved factors contributing to students' trust in their teachers. Unlike Part A, where the answers were structured and analysed to compare and contrast the effect of culture and the year of attendance, the ranking results in Part B were recoded as numbers to indicate the relative importance of each factor. For instance, the third question in Part B is:

Please choose from the following items that you think have influence over you in establishing trust towards your teachers, and rank the items you choose from the most essential to the least important directly. (Choose all items that apply.) Please list the items you selected in this space:

- A. Teachers' intelligence.
- B. Teachers' expertise.
- C. Teachers' moral standards.
- D. Teachers' authoritative figure over students.
- E. Teacher sets strict classroom discipline.
- F. Teacher imposes heavy workload on students.
- G. Teachers' teaching style.
- H. Others: \_\_\_\_\_

Students could select some or all of the listed factors and rank them. For example, a student might give an answer: B, A, C, G, E. Because there were eight possible factors in total, the answer was recoded as an eight-point score, from the factor with the highest rank to the one with the lowest rank. In this example, B would be recoded as 8, A would be recoded as 7, and so on. Besides B, A, C, G and E, the remaining factors, including D, F



and H, were recoded as one, corresponding to the lowest rank, because they did not appear in the student's list.

After the recoding process, students' values on the importance of each factor could be analysed. Therefore, the effects of culture and the year of attendance on those factors were investigated and statistically tested by employing ANOVA.

Some students did not answer Part B of the student questionnaire, so their answers were not used in the analyses.

#### *4.1.3.1 Effects of culture and the year of attendance on the importance of teachers' intelligence*

The following figure gives the means of the importance of teachers' intelligence (corresponding to Option A) on students' trust in teachers:

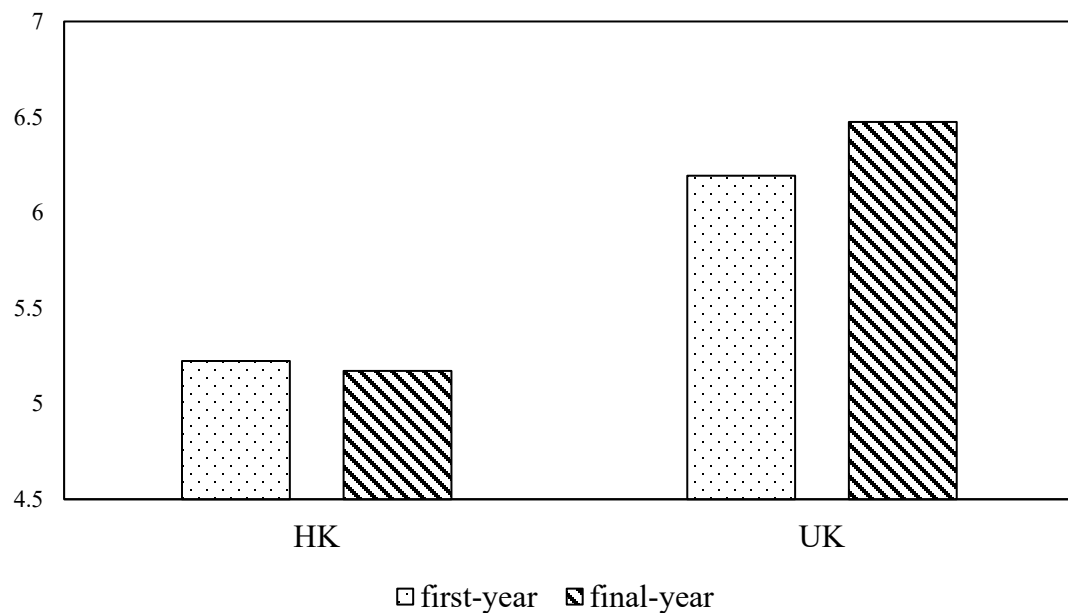


Figure 8: Means of importance of teachers' intelligence scores in the four groups

Clearly, the UK students put much more value on teachers' intelligence, and the main effect of culture was statistically significant ( $F(1, 269) = 15.364, p < 0.001$ ). Apart from the cultural effect, the main effect of the year of attendance ( $F(1, 269) = 0.156, p = 0.693$ )

and the interaction between culture and year of attendance ( $F(1,269) = 0.331, p = 0.566$ ) were not found to be insignificant.

#### 4.1.3.2 Effects of culture and year of attendance on importance of teachers' expertise

The following figure displays the means of the importance of teachers' expertise (corresponding to Option B) on students' trust in teachers:

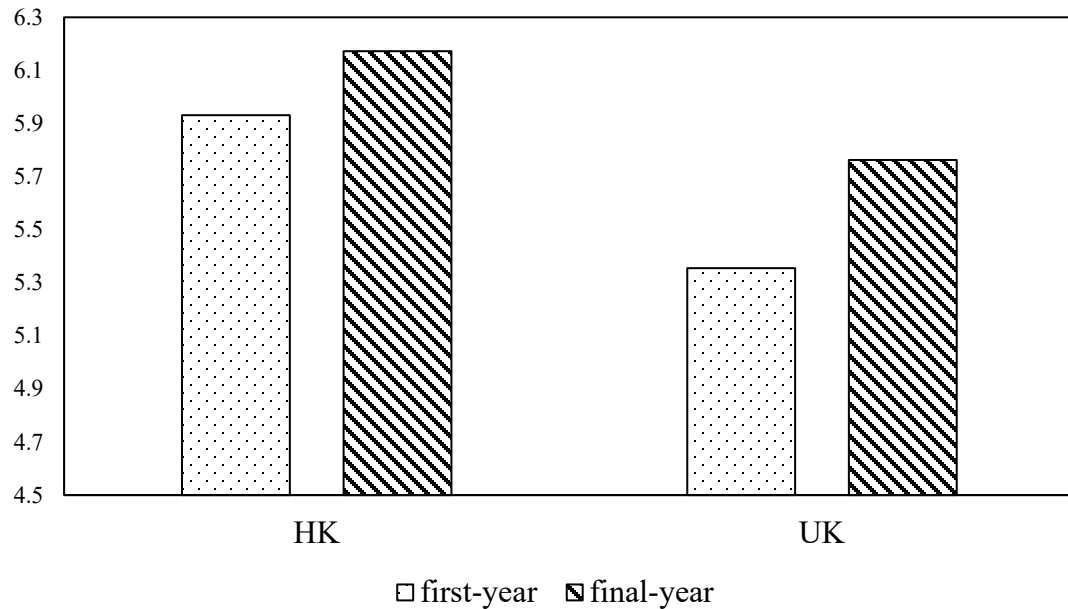


Figure 9: Means of importance of teachers' expertise in the four groups

In general, the final-year students tended to put more value on teachers' expertise than first-year students; however, the main effect of the year of attendance was not statistically significant ( $F(1,269) = 1.227, p = 0.269$ ). No main effect of culture ( $F(1,269) = 2.830, p = 0.094$ ) or the interaction effect ( $F(1,269) = 0.081, p = 0.776$ ) was found.

#### 4.1.3.3 Effects of culture and the year of attendance on the importance of teachers' moral standard

The means of the importance of teachers' moral standard (corresponding to Option C) on students' trust in teachers are shown in the following figure:

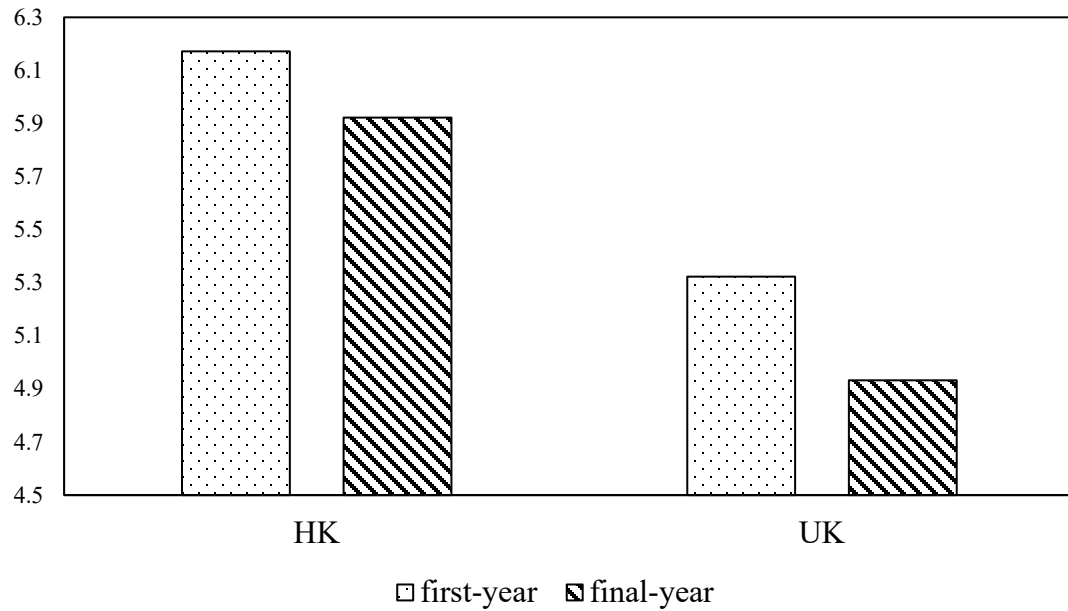


Figure 10: Means of importance of teachers' moral standard in the four groups

As we can observe, the HK students valued teachers' moral standard much more than UK students, and the observation was supported by statistically testing ( $F(1,269) = 9.621, p = 0.002$ ). Besides, the first-year students tended to place more value on teachers' moral standard than final-year students; however, the main effect of the year of attendance was not statistically significant ( $F(1,269) = 1.168, p = 0.281$ ). The interaction of culture and year of attendance was also found not significant ( $F(1,269) = 0.056, p = 0.814$ ).

#### 4.1.3.4 Effects of culture and year of attendance on importance of teachers' authority

The means of the importance of teachers' authority (corresponding to Option D) on students' trust in teachers are given in the following figure:

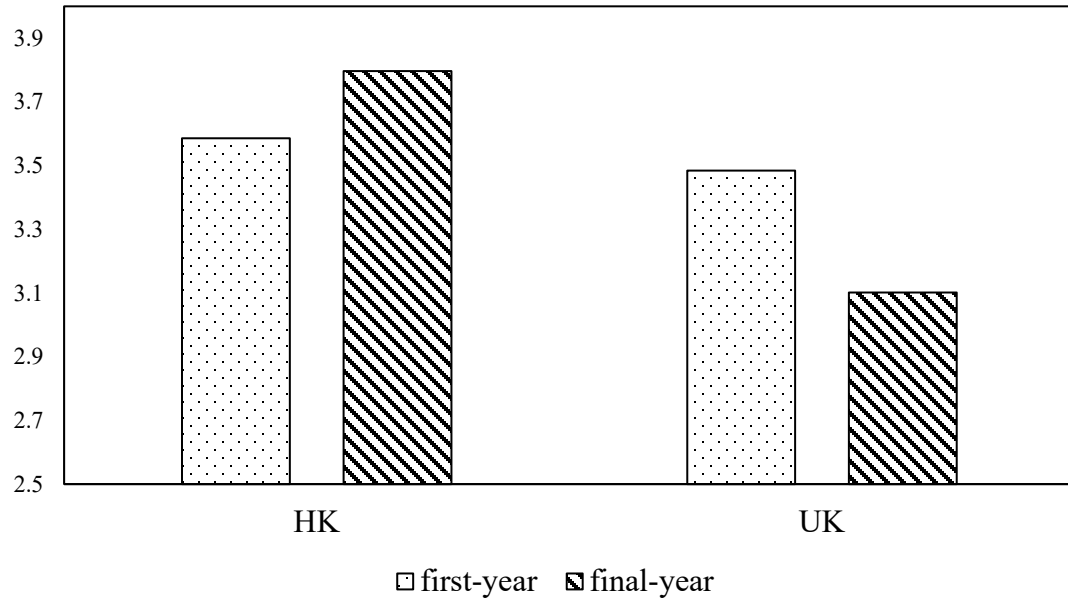


Figure 11: Means of importance of teachers' authority in the four groups

As we can observe, the HK students clearly put more value on teachers as an authority figure over students than the UK students. This effect of culture on the importance of teachers' authority was found to be not significant ( $F(1,269) = 2.342$ ,  $p = 0.127$ ). Apart from that, the main effect of the year of attendance ( $F(1,269) = 0.108$ ,  $p = 0.742$ ) and interaction effect between culture and year of attendance ( $F(1,269) = 1.294$ ,  $p = 0.256$ ) were not significant.

#### 4.1.3.5 Effects of culture and the year of attendance on importance of teachers' class discipline

The means of the importance of teachers' strictness on classroom discipline (corresponding to Option E) on students' trust in teachers are given in the following plot:

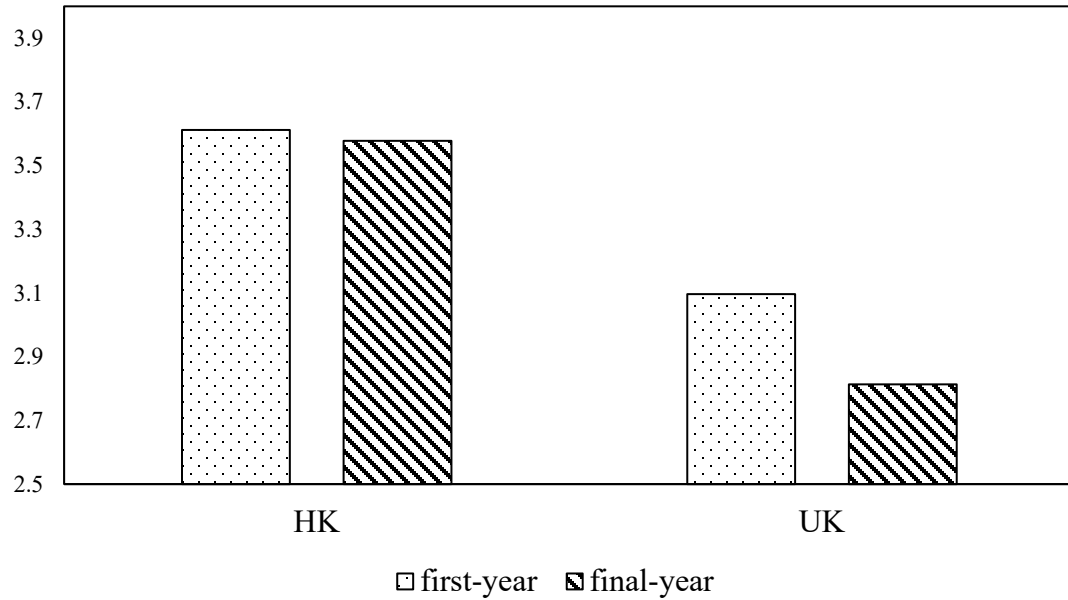


Figure 12: Means of importance of teachers' strictness of classroom discipline in the four groups

Similar to teachers' authority, teachers' strictness of classroom discipline was given more value by the HK students than the UK students; the cultural difference in the importance of teachers' strictness of classroom discipline was statistically significant ( $F(1,269) = 6.843, p = 0.009$ ). Apart from that, neither the main effect of the year of attendance ( $F(1,269) = 0.420, p = 0.517$ ) nor the interaction effect ( $F(1,269) = 0.260, p = 0.611$ ) was significant.

#### 4.1.3.6 Effects of culture and the year of attendance on importance of class workload

The means of the importance of the heaviness of class workload given by teachers (corresponding to Option F) on students' trust in teachers are given in the following figure:

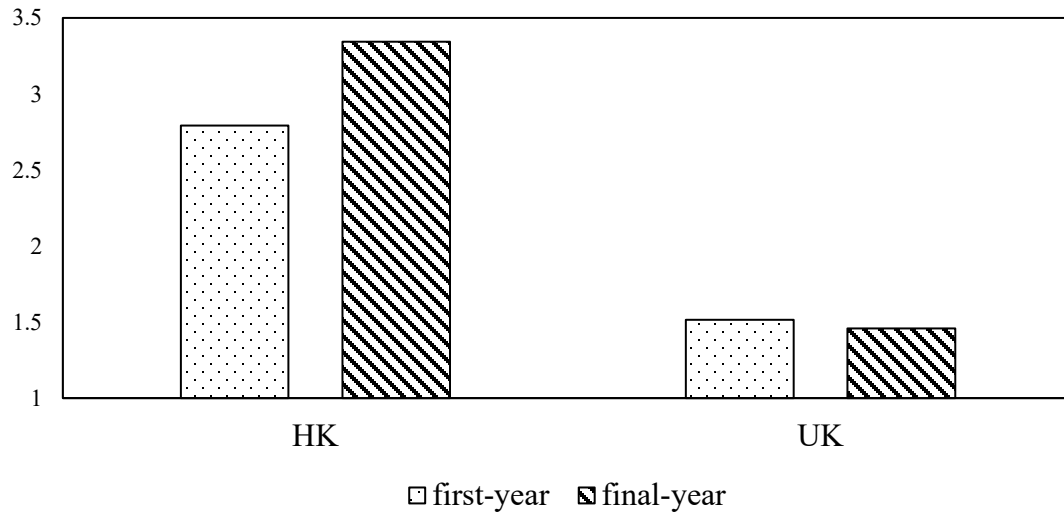


Figure 13: Means of importance of heaviness of class workload in the four groups

Again, the HK students put more value on the heaviness of class workload given by teachers than UK students, and the cultural or cultural effect was found to be statistically significant ( $F(1,269) = 61.426, p < 0.001$ ). Besides, the effect of the year of attendance was not found to be significant ( $F(1,269) = 1.487, p = 0.224$ ), which was probably driven by the fact that the final-year HK students put more value upon the heaviness of class workload than the first-year HK students. Lastly, the interaction effect between culture and year of attendance was not significant ( $F(1,269) = 2.278, p = 0.132$ ).

#### 4.1.3.7 Effects of culture and the year of attendance on the importance of teaching style

The means of the importance of teachers' teaching style (corresponding to Option G) on students' trust in teachers are given in the following figure:

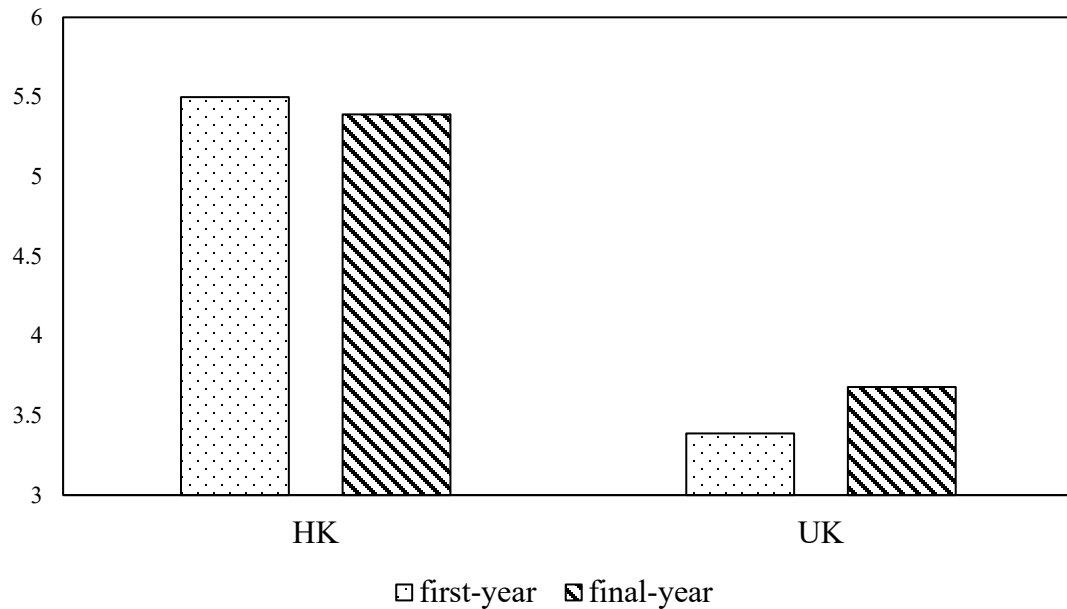


Figure 14: Means of importance of teaching style in the four groups

As for teaching style, the HK students put more value on it than UK students, and the cultural difference in the importance of teachers' teaching style on students' trust in teachers was statistically significant ( $F(1,269) = 34.404, p < 0.001$ ). Apart from the cultural effect, the main effect of the year of attendance ( $F(1,269) = 0.077, p = 0.781$ ) and the interaction effect ( $F(1,269) = 0.377, p = 0.540$ ) were found to be not significant.

To summarize the results of the third question of Part B, the cultural effect was the dominant one, and cultural difference was found for several factors. The UK students valued their teachers' intelligence more than HK students; and the HK students put more value on teachers' authority figure, moral standards, strictness of class discipline, heaviness of workload and teaching style than UK students. The HK and UK students put almost equivalent value on the teachers' expertise.

#### 4.1.4 Factors contributing to students' trust in teachers

Both Part A and Part B of the student questionnaire involved the factors contributing to students' trust in teachers. Part A tackled those factors by measuring several factors and students' actual trust in teachers using a five-point Likert-scale. Part B tackled those factors by directly asking students to rank the factors, using a ranking type of question.

In this section, the relative importance of contributing factors was first investigated, then the important and statistically significant factors were selected to build the contributing-factor model.

#### *4.1.4.1 Relative importance of contributing factors (Part A)*

In Part A, several possibly relevant factors including class atmosphere, teachers' expertise, teachers' authority, students' expected closeness with teachers and students' trust in teachers were measured using five-point Likert-scale questions. The correlational analysis between each individual factor and trust is detailed in section 3.1.2. To compare the relative importance of those factors, we need to include all those factors in one unified model.

Linear regression is the perfect statistical tool to include all possible relevant factors in one model and make them comparable. In linear regression, the unique contribution of each factor, measured by the regression coefficient (beta), was estimated using the least-squared error method. To make the regression coefficient comparable, the betas need to be standardized.

Linear regression was conducted with trust as the dependent variable, and the culture, year of attendance, class atmosphere, authority, closeness, expertise and importance as independent variables. The following table gives the estimated parameters of the model.

Table 3: Estimated parameters of the model

<b>Independent variable</b>	<b><math>\beta</math> (beta)</b>	<b>SE</b>	<b>B (standardized beta)</b>	<b>t</b>	<b>P</b>
(Intercept)	-0.144	0.41		-0.352	0.725
culture	-0.079	0.081	-0.057	-0.98	0.328
year of attendance	-0.073	0.07	-0.054	-1.041	0.299
importance	0.439	0.058	0.402	7.509	<0.001***
expertise	0.024	0.072	0.017	0.329	0.743
authority	0.378	0.073	0.259	5.2	<0.001***
closeness	0.138	0.07	0.107	1.954	0.052
atmosphere	0.124	0.052	0.137	2.389	0.018*



The fit index of the model, namely R squared, was 0.320, meaning that around 32 per cent of the variance of trust could be explained by the independent variables in the model. The statistical testing on the overall model fit was significant ( $F(7, 283) = 19.027, p < 0.001$ ), meaning that the independent variables are valid relevant factors.

Among those independent variables, the regression coefficients of importance, authority, and class atmosphere were significant, suggesting that those three factors were the most relevant factors. Take the independent variable of importance as an example: the regression coefficient of importance was 0.439, meaning that, with each point increase of students' attitude to the importance of teacher–student relationship, the score of students' trust in teachers would increase by 0.439.

To compare the relative importance of those factors, the standardized regression coefficients should be investigated. The following figure exhibits the standardized regression coefficients of those independent variables:

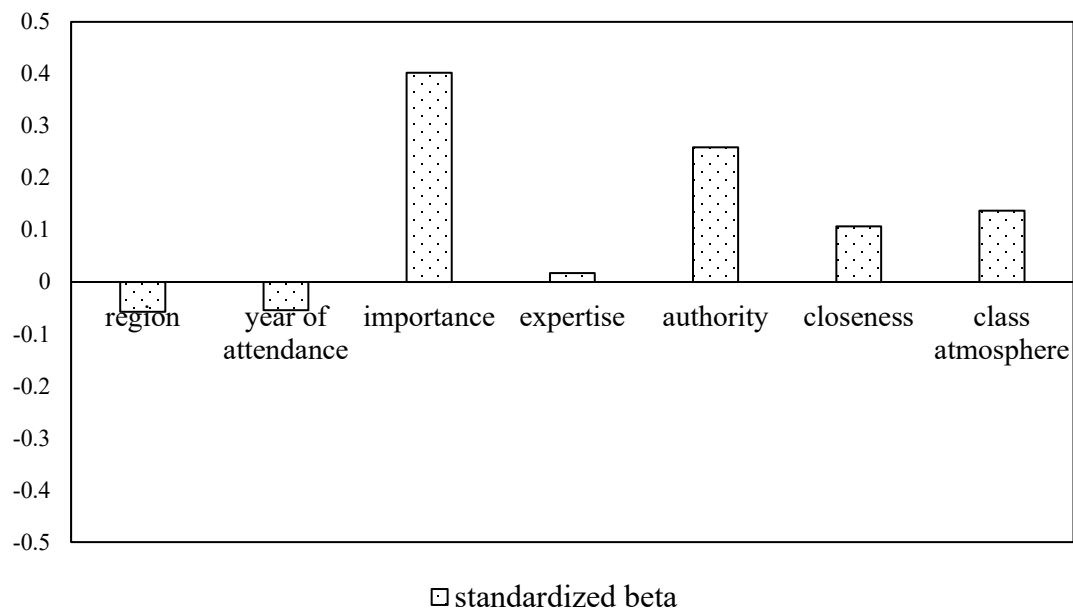


Figure 15: Standardized regression coefficients of independent variables

For the factors with positive regression coefficients, students' attitude to the importance of the teacher–student relationship was the most important factor. On the other hand,

students' attitude to teachers' authority was a major negative factor that influenced students' trust in teachers.

To take the absolute value of standardized regression coefficients as a standard of importance, the most important factors contributing to students' trust in teachers were: importance, authority and class atmosphere.

#### *4.1.4.1.1 Relative importance of contributing factors in first-year HK students*

The same linear regression model was conducted using the HK first-year data set.

Table 4: Factors contributing to trust in first-year HK students

<b>Independent variable</b>	<b><math>\beta</math> (beta)</b>	<b>SE</b>	<b>B (standardized beta)</b>	<b>t</b>	<b>P</b>
(Intercept)	-0.822	0.542		-1.517	0.132
importance	0.16	0.097	0.149	1.662	0.099
expertise	0.088	0.088	0.077	0.993	0.323
authority	0.48	0.117	0.303	4.104	<0.001***
closeness	0.374	0.103	0.331	3.621	<0.001***
atmosphere	0.157	0.068	0.177	2.301	0.023*

R squared for this model was 0.411, meaning that around 41.1 per cent of the variance of trust could be explained by the independent variables in the model. The statistical testing on the overall model fit was significant ( $F(5,111) = 15.482, p < 0.001$ ), meaning that the independent variables are valid relevant factors.

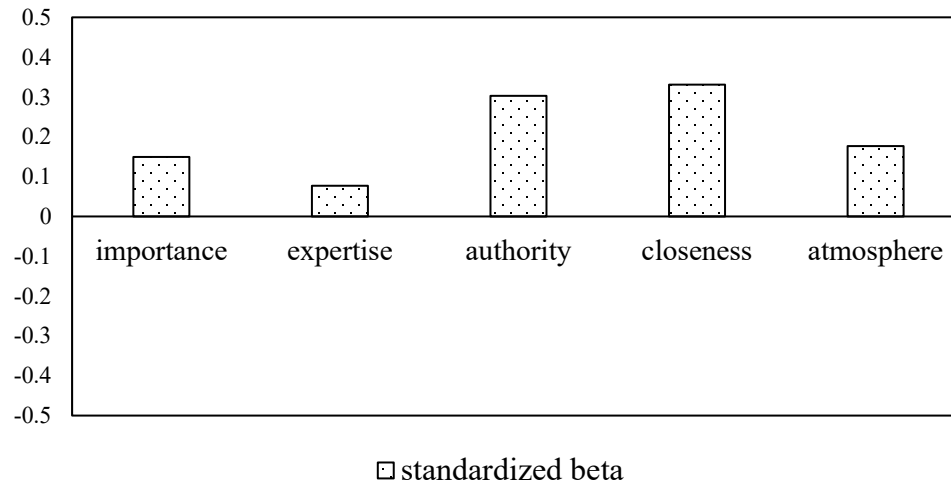


Figure 16: Most important independent variables in first-year HK students

The most important factors contributing to the first-year HK students' trust in teachers were: authority, closeness and class atmosphere.

#### 4.1.4.1.2 Relative importance of contributing factors in final-year HK students

The same linear regression model was conducted using the HK final-year data set.

Table 5: Factors contributing to trust in final-year HK students

Independent variable	$\beta$ (beta)	SE	B (standardized beta)	t	P
(Intercept)	0.302	0.919		0.329	0.744
importance	0.63	0.107	0.6	5.904	<0.001***
expertise	-0.208	0.166	-0.125	-1.249	0.217
authority	0.521	0.172	0.293	3.034	0.004**
closeness	-0.021	0.154	-0.014	-0.138	0.891
atmosphere	0.03	0.106	0.028	0.285	0.777

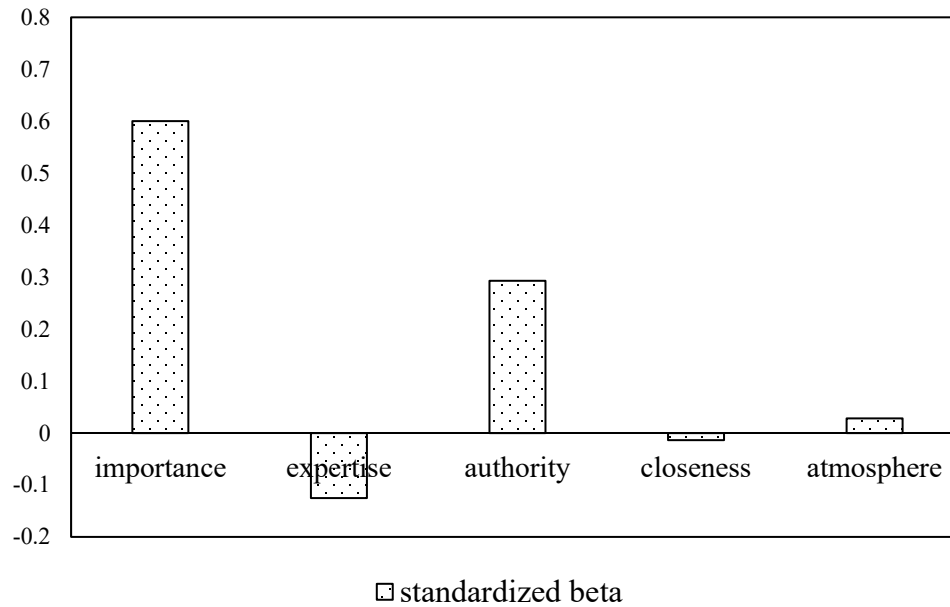


Figure 17: Most important independent variables in final-year HK students

R squared for this model was 0.480, meaning that around 48 per cent of the variance of trust could be explained by the independent variables in the model. The statistical testing on the overall model fit was significant ( $F(5,58) = 10.722, p < 0.001$ ), meaning that the independent variables are valid relevant factors.

The most important factors contributing to the HK final-year students' trust in teachers were importance and authority.

#### 4.1.4.1.3 Relative importance of contributing factors in UK first-year students

The same linear regression model is conducted using the UK first-year data set.

Table 6: Factors contributing to trust in first-year UK students

Independent variable	$\beta$ (beta)	SE	B (standardized beta)	t	P
(Intercept)	-1.271	2.066		-0.615	0.543
importance	0.466	0.192	0.394	2.423	0.021*
expertise	-0.054	0.294	-0.031	-0.185	0.855
authority	0.565	0.289	0.31	1.957	0.059
closeness	0.17	0.292	0.099	0.584	0.564
atmosphere	0.189	0.198	0.157	0.954	0.348

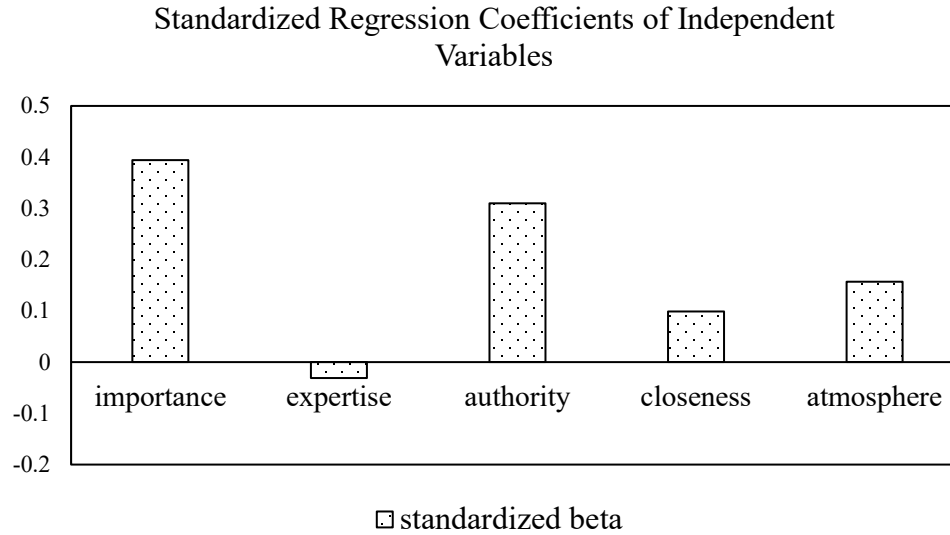


Figure 18: Most important independent variables in first-year UK students

R squared for this model was 0.298, meaning that around 29.8 per cent of the variance of trust could be explained by the independent variables in the model. The statistical testing on the overall model fit was significant ( $F(5,31) = 2.634, p = 0.043$ ), meaning that the independent variables are valid relevant factors.

The most important factor contributing to UK first-year students' trust in teachers was importance.

#### 4.1.4.1.4 Relative importance of contributing factors in UK final-year students

The same linear regression model is conducted using the UK final-year data set.

Table 7: Factors contributing to trust in final-year UK students

Independent variable	$\beta$ (beta)	SE	B (standardized beta)	t	P
(Intercept)	0.29	0.919		0.315	0.754
importance	0.346	0.132	0.313	2.625	0.011*
expertise	0.167	0.17	0.121	0.979	0.331
authority	0.166	0.12	0.16	1.387	0.17
closeness	0.07	0.138	0.063	0.51	0.612
atmosphere	0.137	0.127	0.124	1.083	0.283

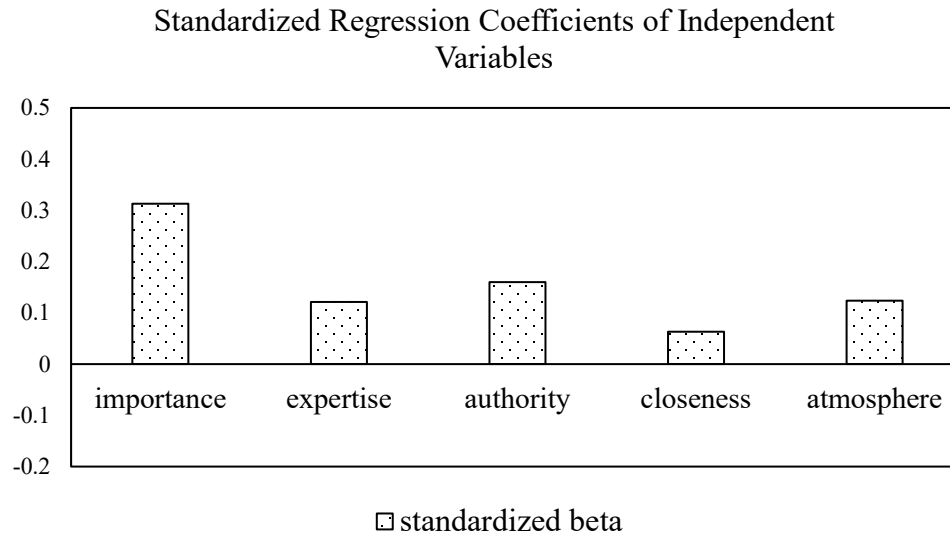


Figure 19: Most important independent variables in final-year UK students

R squared for this model was 0.190, meaning that around 19 per cent of the variance of trust could be explained by the independent variables in the model. The statistical testing on the overall model fit was significant ( $F(5,67) = 3.138, p = 0.013$ ), meaning that the independent variables are valid relevant factors.

The most important factor contributing to the UK final-year students' trust in teachers was importance.

In conclusion, most of the UK students valued trust according to the importance of the teacher–student relationship, while the HK students tended to value trust based on factors such as closeness, importance of relationship, authority and class atmosphere. Three of the four, the importance of relationship, authority and class atmosphere, were found to be important factors overall.

#### *4.1.4.2 Relative importance of contributing factors (Part B)*

Part B of the student questionnaire addressed the issue of contributing factors in a different way. The third question of Part B asked students directly to rank the candidate factors. Therefore, the recoded results of Part B could be compared directly, and no linear regression and standardization were necessary.

Because cultural difference was of critical importance to the study and above analyses had shown significant cultural differences, the student sample was first split into the HK group and the UK group, then the factors were ranked according to the recoded scores.

The following figure gives the mean score of each factor in descending order for the HK group:

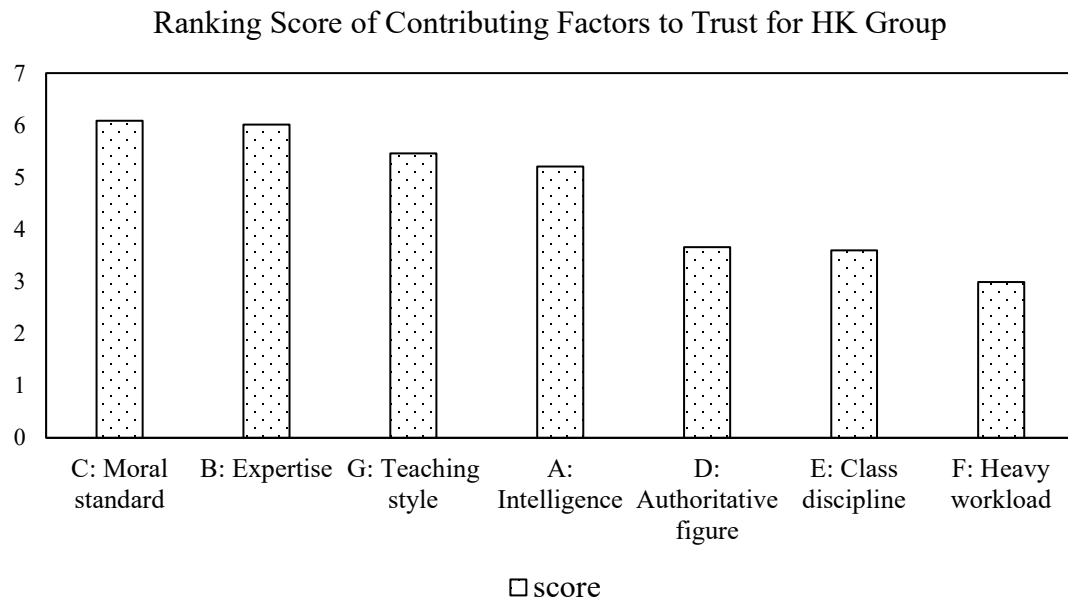


Figure 20: Mean scores of factors for HK group

For HK students, the top four factors of their trust in teachers were teachers' moral standards, teachers' expertise, teachers' teaching style and teachers' intelligence. The remaining three factors, namely teachers' authority figure over students, teachers' strictness on class discipline and the heaviness of the class workload, took lower priority.

To determine whether the difference in the score of those factors was significant or not, paired t-tests were employed at each step of the ranking. Specifically, the t-test was conducted to explore the significance of the difference between the first-order factor, the moral standards, and the second-order factor, expertise; and t-test was also conducted to determine the significance of the difference between the second-order factor, expertise, and the third-order factor, teaching style; and so on. The results are shown in the following table:

Table 8: Paired t-tests to determine the significance in the difference between neighbouring factors for HK students

<b>Factors to compare</b>	<b>Mean difference</b>	<b>t</b>	<b>p</b>
Moral standard: Expertise	0.072	0.389	0.697
Expertise: Teaching style	0.550	2.46	0.015*
Teaching style: Intelligence	0.256	1.096	0.275
Intelligence: Authoritative figure	1.544	6.942	<0.001***
Authoritative figure: Class discipline	0.061	0.426	0.671
Class discipline: Heavy workload	0.611	4.931	<0.001***

There were three significant results in those t-tests: the difference between expertise and teaching style ( $t(180) = 2.460$ ,  $p = 0.015$ ), the difference between intelligence and authority figure ( $t(180) = 6.942$ ,  $p < 0.001$ ), and the difference between class discipline and the heaviness of workload ( $t(180) = 4.931$ ,  $p < 0.001$ ). Therefore, the factors contributing to the HK students' trust in teacher could be classified into four categories according to their relative importance: the first class, with the highest priority, included moral standards and expertise; the second class, with middle-upper priority, included teaching style and intelligence; the third class, with middle-lower priority, included authority figure and class discipline; and the fourth class, with the lowest priority, was the heaviness of the workload.

The following figure displays the mean score of each contributing factor to students' trust in teachers in a descending order for the UK group:



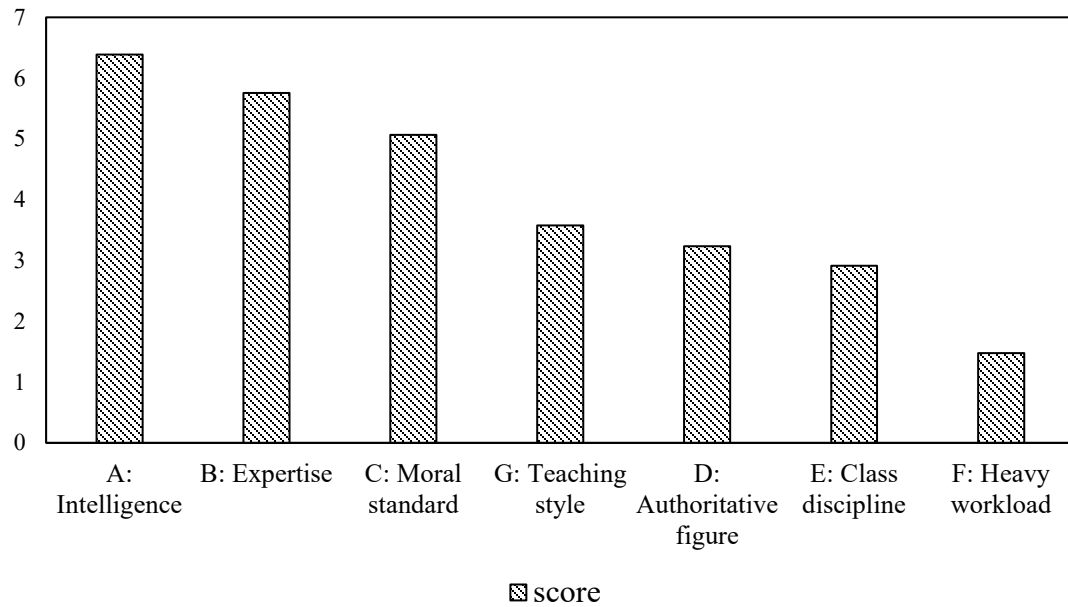


Figure 21: Ranked score of factors contributing to trust for UK students

Unlike the HK students, in evaluating the importance of factors contributing to their trust in teachers, the UK students gave top priority to teachers' intelligence. Another difference was that teachers' moral standards, which were ranked first by the HK students, ranked only third for the UK students. However, similar to the HK students, the UK students thought the authority figure, strictness of class discipline and the heaviness of the workload contributed least to their trust in teachers.

Similarly, paired t-tests were employed to determine the significance in the difference between neighbouring factors. Here are the results:

Table 9: Paired t-tests to determine the significance in the difference between neighbouring factors for UK students

<b>Factors to compare</b>	<b>mean difference</b>	<b>t</b>	<b>p</b>
Intelligence: Expertise	0.63333	1.777	0.079
Expertise: Moral standard	0.68889	2.162	0.033*
Moral standard: Teaching style	1.48889	3.796	<0.001***
Teaching style: Authoritative figure	0.34444	0.974	0.333
Authoritative figure: Class discipline	0.32222	1.542	0.127
Class discipline: Heavy workload	1.43333	6.936	<0.001***

According to the significance results, the factors contributing to students' trust in teachers could be categorized into four subsets: the first class with highest priority included intelligence and expertise, the second class with middle-upper priority included moral standards, the third class with middle-lower priority included teaching style, authority figure and class discipline, and the fourth class with lowest priority was the heaviness of the workload.

#### *4.1.4.3 Factor selection with backward elimination*

After identifying the relative importance of contributing factors, the next step was to build a model using the appropriate factors. Because the types of questions in Part A and Part B were incompatible and the format of Part A was more appropriate for building regression model, this section will focus on the results of Part A of the student questionnaire.

To decide which factor to include in the model, the technique of backward elimination in linear regression was used. In backward elimination, a full model with all factors as independent variables is first built, and then the iteration begins. At each loop of iteration, the variable with the highest p-value (thus the most insignificant variable) was excluded from the model, and F-change was used to test whether the R squared significantly dropped. If the R squared dropped significantly, the iteration ended, otherwise the next loop of iteration began. The rationale is that, if the exclusion of one variable does not result in a significant drop in model fit, then the variable may be unimportant.

The following table gives the statistical results for the model versions at each loop of iteration:

Table 10: Iterations of linear regression to establish model fit

Model	Independent variables	Excluded variable	R squared	R squared change	F-change	P
Model 1	culture + year of attendance + importance + expertise + authority + closeness + class atmosphere		0.32			
Model 2	culture + year of attendance + importance + authority + closeness + class atmosphere	expertise	0.305	<0.001	0.108	0.743
Model 3	Year of attendance + importance + authority + closeness + class atmosphere	expertise + culture	0.320	-0.002	0.988	0.321
Model 3	importance + authority + closeness + class atmosphere	Expertise + culture, year of attendance	0.317	-0.004	1.848	0.175

From Model 1 to Model 2, after the exclusion of teachers' expertise, the model fit did not change significantly ( $F(1) = 0.108$ ,  $p = 0.743$ ). From Model 2 to Model 3, after the exclusion of expertise and culture, the model fit did not change significantly either ( $F(2) = 0.988$ ,  $p = 0.321$ ). From Model 3 to Model 4, after the exclusion of expertise, culture and year of attendance, the model fit did not change significantly either ( $F(3) = 1.848$ ,  $p = 0.175$ ). However, starting from Model 5, the exclusion of any independent variable resulted in significant drop in model fit, which indicated that Model 4 is the best model.

The following table gives the regression coefficients of each independent variable in Model 4:

Table 11: Regression coefficients of each independent variable in Model 3

<b>Independent variable</b>	<b><math>\beta</math> (beta)</b>	<b>t</b>	<b>SE</b>	<b>p</b>
importance	0.4	7.471	0.058	< 0.000***
authority	0.259	5.212	0.072	< 0.000***
closeness	0.114	2.172	0.067	0.031*
class atmosphere	0.108	2.121	0.046	0.035*

All the independent variables had significant regression coefficients at 0.05 level or 0.001 level. The R squared for model 5 was 0.349 ( $F(4, 286) = 32.571, p < 0.001$ ), indicating that around 35 percent of the variance of students' trust could be accounted for by Model 5.

#### 4.1.5 Towards a dynamic and unified model

The above sections have investigated the correlations between trust and other factors, the cultural differences of those factors, and the relative importance of contributing factors. So far, those processes have been analysed separately, and those conclusions are of limited utility in explaining complex and comprehensive relations between factors, which were usually the reality of the world.

This section aims to build a dynamic and comprehensive model that incorporates the above factors and processes and gives a statistically valid explanation of those interplaying factors.

Structural equation modelling (SEM) is a perfect statistical tool to build up such models. SEM takes the variance-covariance matrix of observed variables as input and could model the relations between factors and variables and the complex interplay between factors.

There were two important steps in this process of modelling. First, an appropriate structure of the interrelations between variables and factors was proposed and showed a relatively good model fit. Second, since cultural difference is one of the critical concerns in the current study, the moderation effects of culture were investigated thoroughly on each linkage of the established model.

#### 4.1.5.1 *The importance-mediated versus closeness-mediated model*

Establishing the mechanism whereby the factors contributed to students' trust in teachers was a complicated process. According to the conclusions of above analyses, the significant factors were: students' attitude to the importance of the teacher–student relationship (importance), students' expected closeness in their relationship with teachers (closeness), students' expectations of teachers' authority (authority), and students' preference for an active and efficient class atmosphere (class atmosphere). Therefore, these factors are included in the SEM model. The question is, how did those factors interact to affect students' trust in teachers?

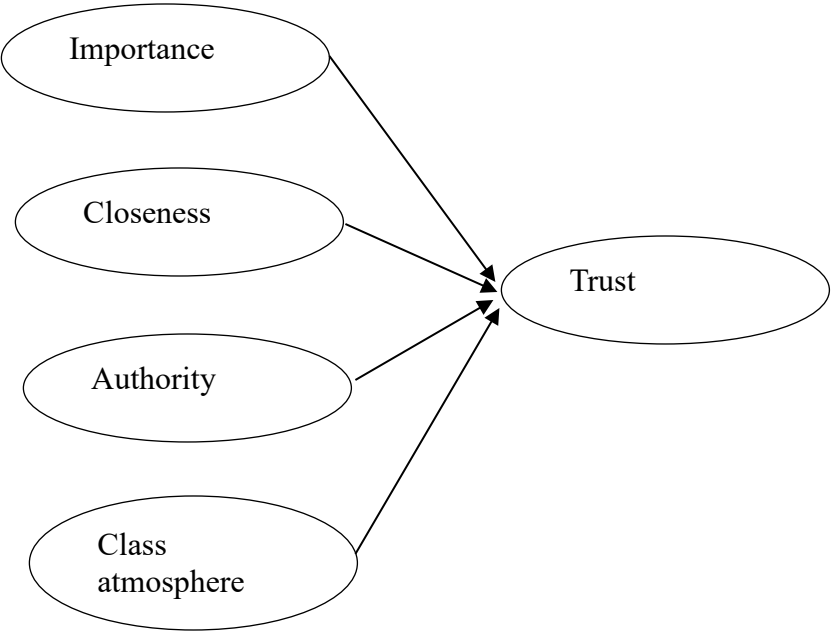
One reasonable hypothesis is that other factors not only affected the trust directly but via the indirect mediation of its importance. In other words, closeness, authority and class atmosphere affected students' attitudes to the importance of the teacher–student relationship, and then the importance affected students' trust in teachers. The model based on this hypothesis is referred to as the *importance-mediated model*.

Another reasonable hypothesis is that other factors affected students' trust in teachers directly, and also indirectly affected students' trust in teachers through the mediation of closeness. That is, the importance, authority and class atmosphere affected students' expected closeness with teachers first, and then students' expected closeness with teachers affected their trust in teachers. The model based on this hypothesis is referred to as the *closeness-mediated model*.

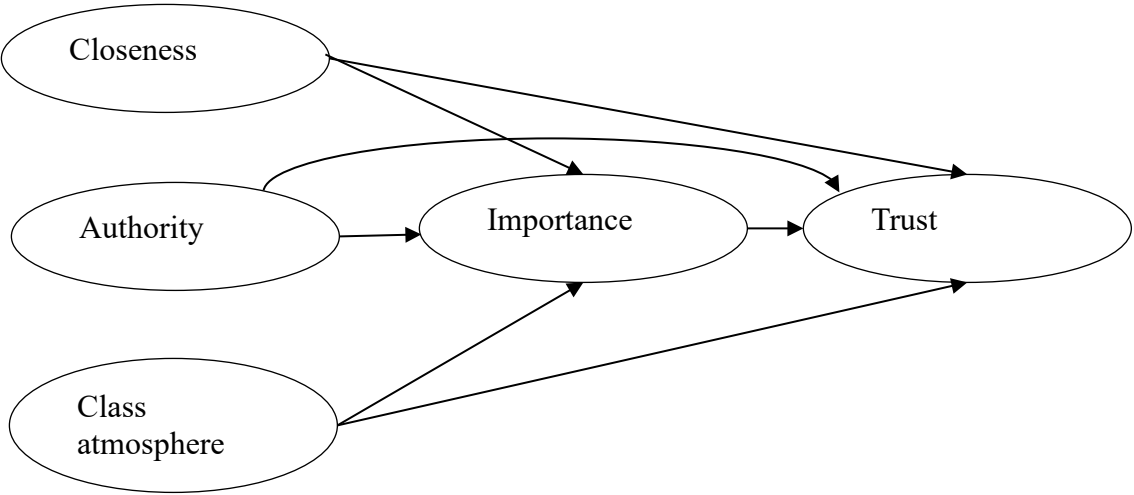
To test the statistical validity of those two proposed models, the model fit of proposed models needed to be compared to a baseline model. In this specific question, the appropriate baseline model would be the model without any mediation. In other words, in the baseline model, all four contributing factors, including importance, authority, closeness and class atmosphere, affected students' trust in teachers directly, and only directly.

The following three diagrams illustrate the structure of the three models:

Baseline Model



Importance-mediated Model



### Closeness-mediated Model

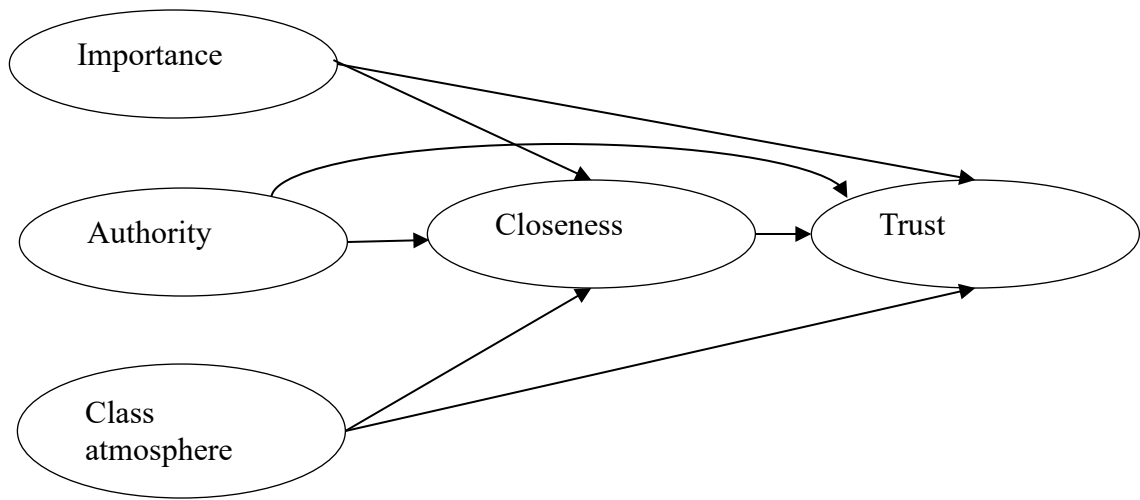


Figure 22: Baseline, importance-mediated and closeness-mediated models of trust in teachers

The variance-covariance matrix of relevant variables (i.e. scores of questions in the survey) was used as the SEM model input. Three SEM models were established, according to the three model structures above. The variances of factors were set to one, to avoid model under-identification.

To validate the statistical soundness of each model, the fit indices were checked. Moreover, to select the most appropriate model, model comparison was undertaken based on the model fit. The following table gives the fit indices of three models.

Table 12: Fit indices of the three models

	<b>Baseline model</b>	<b>Importance- mediated model</b>	<b>Closeness- mediated model</b>
Chi-square	293.889	266.721	269.334
<i>df</i> of Chi-square	148.000	145.000	145.000
<i>p</i> -value of Chi-square	0.000	0.000	0.000
Chi-square change	NA	27.169	24.556
<i>df</i> of chi-square change	NA	3.000	3.000
<i>p</i> -value of chi-square change	NA	<0.000***	<0.000***
Goodness-of-fit	0.879	0.888	0.888
Adjusted Goodness-of-fit	0.845	0.854	0.854
RMSEA	0.065	0.060	0.060
NFI	0.796	0.815	0.813
NNFI	0.867	0.887	0.885
CFI	0.885	0.904	0.902
SRMR	0.079	0.070	0.071
AIC	377.889	356.721	359.334
BIC	-514.758	-525.535	-667.922

For the fit indices, the baseline model obtained a goodness-of-fit of 0.879, very close to the well-recognized 0.9 level, meaning that the baseline model already had a relatively good model fit. Other indices such as NFI, NNFI and CFI were also close to or above 0.8, and residual-related indices like RMSEA and SRMR were close to 0.05, also implying a relatively good model fit.

One important statistical test in model comparison is the chi-square change test. If the chi-square change test between two models is significant, the model with the smaller chi-square is preferable because it achieves a smaller discrepancy between the observed variance-covariance matrix and the fitted variance-covariance matrix using a specified model structure.

The chi-square change test between baseline model and importance-mediated model was significant ( $p < 0.001$ ), meaning that the importance-mediated model fitted the observed data better. Meanwhile, the chi-square change test between baseline model and closeness-mediated model was also significant ( $p < 0.001$ ), suggesting that the closeness-mediated



model was also better than the baseline model. Therefore, there is nothing between using the importance-mediated model or the closeness-mediated model, based on the chi-square change test.

Another method to compare two SEM models was to compare the BIC value; the smaller the BIC value, the better the model. The importance-mediated model obtained a BIC value of -525.5, while the closeness-mediated model obtained a BIC of -667.9. As a result, the closeness-mediated model was superior to the importance-mediated model by the measure of BIC, and thus was selected.

The following diagrams display the parameters estimated in the closeness-mediated model:

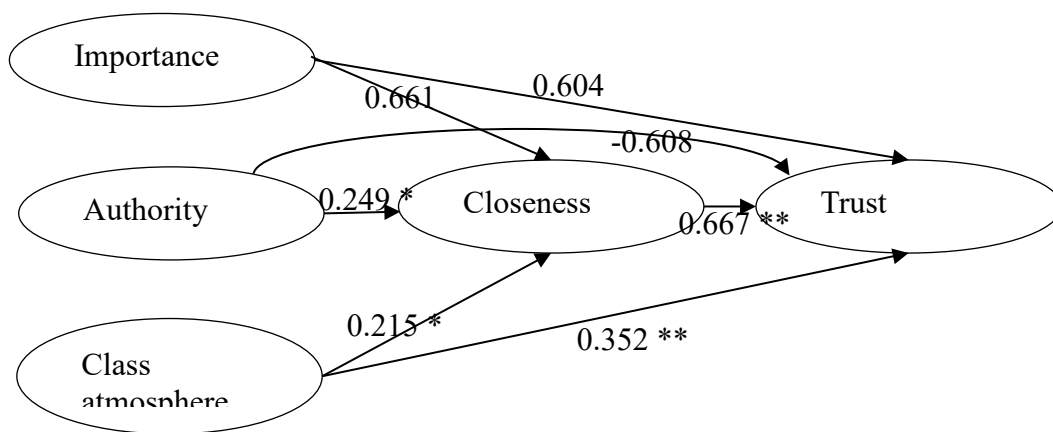


Figure 23: Closeness-mediated model of trust in teachers

#### 4.1.5.2 The moderation effect of culture

To incorporate the moderation effect into the SEM model, two-group SEM analysis was introduced. In this specific case, the critical moderation variable (moderator) was culture; specifically, whether the complicated interrelations found in the model in the last section were subject to cultural influence.

In practice, the dataset was split into two subsets: the HK and the UK students. Two-group SEM analysis was conducted using the *lavaan* package in the R software. The following table gives a summary of the fit indices of the two-group closeness-mediated model:

Table 13: Fit indices of the two-group closeness-mediated model

<b>Two-group closeness-mediated model</b>	
RMSEA	0.066
NFI	0.813
NNFI	0.885
CFI	0.891
SRMR	0.081
AIC	10496.923
BIC	10961.077

The fit indices indicated that the model fit of the two-group closeness-mediated model was relatively good.

By adding constraints on the paths in the two-group model, we could find out how culture moderated the effect of the factors contributing to trust. Through the chi-square change test, we could find out whether the moderation effect was significant or not. The rationale was that if the addition of one constraint increased the model fit, then the constraint would be statistically meaningful. Therefore, the moderation effect introduced by that constraint was statistically significant.

Different types of constraints were added to create different models, and those models were compared with the baseline two-group model specified above. To be specific, those models included one fully constrained model, which set all the paths between factors the same in the two groups, and seven partly constrained models, which set only one of the paths the same in the two groups. The following table shows the chi-square change test results of those models:

Table 14: Chi-square change test results for these models

	<b>Chi-square change</b>	<b>df change</b>	<b>p</b>
Fully constrained	14.056	7	0.050
Partly constrained: importance -> trust	0.510	1	0.475
Partly constrained: authority -> trust	3.544	1	0.060
Partly constrained: closeness -> trust	2.792	1	0.095
Partly constrained: class atmosphere -> trust	0.396	1	0.529
Partly constrained: authority -> closeness	0.054	1	0.817
Partly constrained: importance -> closeness	3.739	1	0.053
Partly constrained: class atmosphere -> closeness	9.258	1	0.002

Of the above models, the chi-square change test on the fully constrained model was significant ( $p = 0.050$ ), indicating that culture moderated the overall interplay between factors. In other words, the overall interrelation pattern between factors was different for the HK students and the UK students.

In the comparisons of partly constrained models, the chi-square change test on the constraints of how authority affected trust ( $p = 0.060$ ), how closeness affect trust ( $p = 0.095$ ), how importance affected closeness ( $p = 0.053$ ), and how class atmosphere affected closeness ( $p < 0.01$ ) was significant or marginally significant. Those results suggested that there was a cultural difference in students' attitudes to teachers' authority and in how students' expected closeness with teachers affected their trust in teachers. Besides, there was a cultural difference in students' attitude to the importance of the teacher–student relationship and how students' preference for an active and efficient class atmosphere affected their expected closeness with teachers, which would also affect students' trust in teachers, ultimately.

#### 4.1.6 Qualitative analysis on interviews with students

Although the data from questionnaires gave plenty of information on students' trust in teachers and statistical models were proposed to explain the mechanism of factors affecting the trust, data from interview could give more detailed information from the

perspective of students and could serve as an important supplement to the above quantitative models.

Four students from Hong Kong and the United Kingdom were interviewed, and all were asked the same 10 questions. They were encouraged to talk about their experience of any teacher whom they had in their lives and to elaborate using examples. Students' cultural background was not identified in the analysis, because the purpose of the qualitative analysis was to provide insights into the quantitative analyses rather than to compare and contrast the two cultures.

The following qualitative analyses started with open coding to explore possible themes of students' experience with their teachers on each question asked. This exploratory process does not serve to generate new hypotheses but to support the results from the above quantitative analyses and find underlying mechanisms in the teacher–student relationship.

#### *4.1.6.1 Theme 1: Caring*

In the first question, the students were asked to describe how their teachers express care. In their answers, they described their experience of care from teachers using specific scenarios or by naming the behaviours of teachers who made them feel cared for. Two dimensions of caring emerged from the answers: the functional dimension of caring; and the interpersonal dimension of caring. The functional dimension emphasizes teachers' concern about students' academic achievement and their willingness to help them in their studies. The interpersonal dimension of caring emphasizes teachers' friendly gestures that create positive feelings in the students, outside of academia.

Two of the students addressed only the functional dimension of care:

- Student 1: My teacher has given me extra time for us to ask questions out of lesson since the content of subject is very challenging which my teacher acknowledged that; therefore, she offers us more opportunities to practice and gave us a very detailed feedback.
- Student 2: Well, I want to say teachers here are more concerned about our study, instead of our health or life, and this is because we are old enough to take care of our daily life and pursue our higher education. Actually, most of students here are younger than me, and they are senior high

school students. This is the reason why teachers deliver classes in a slow pace, and they will not push students to finish learning tasks in a very short time by giving them some time to search for information and discuss within groups. However, as a student with excellent proficiency in English, teachers ask me some questions about whether the learning contents are too easy for me, whether my classmates should be given less instructions when they need to organize their answers by themselves. What's more, when I have some questions that I could not understand, they are ready to explain to me zealously, even though these questions have nothing to do with what I have learned in the class. I mean teachers care for us because they are willing to spend more time to help we learn better.

Other students addressed both dimensions in their answers:

Student 3:

*Interpersonal dimension*

Every time when I wear mask, teachers ask me whether I'm okay or not and tell me to take care.

On the other hand, teachers show positive attitudes and respond like encouraging tone, polite gesture, good eye contact, appropriate facial expression, supportive comment and experience sharing when they talk to me. I feel emotion connection between us.

*Functional dimension*

Also, teachers welcome me and classmates to ask question and answer our question in details.

Student 4:

*Functional dimension*

I remember one time I did not do a very great job in my assignment when I was in the first year of semester. One of my teacher, she was my personal tutor who can help us on anything at the academic.

*Interpersonal dimension*

She provided care and ask about what kind of concerns do I have which I feel warm in my heart. There were many struggles after I came back to Hong Kong for study, and I feel that the teacher really cares, not about the grade but me.

It seems that all the students perceived teachers' caring in their work and emphasized how teachers had helped them to understand new concepts or complete assignments, and only

some mentioned teachers' caring outside of academia. Only Student 3 and 4 elaborated on the interpersonal dimension.

Students' emphasis of the functional dimension of teachers' caring suggests that they put teachers' functional identity before their other identities, for instance as friends or mentors. They see a teacher as someone who serves the role to help to accomplish their academic goals, more than someone who can provide emotional support or with whom they can share everyday thoughts, feelings and emotions.

Students' perception of functional caring from their teachers may indicate their respect for teachers' authority. Teachers' gestures, like helping to complete assignments and answering questions, show their authoritative position in their relationship with students. Meanwhile, students who talked about interpersonal caring may indicate a more equivalent teacher–student relationship.

#### *4.1.6.2 Theme 2: Pleasant experience*

Similar to being asked about caring, students were asked to comment on any pleasant experiences with teachers, from both a functional and an interpersonal perspective.

One student talked only about the interpersonal dimension of a pleasant experience:

Student 1: I remember it was Halloween and everyone had dressed up with different costumes, from the subtlest to the craziest. It was a really fun activity as the teacher and the student will have fun together on that day.

Another student talked only about the functional dimension of pleasant experience:

Student 2: The most memorable experience is whole-class and the teacher actively participated in the lesson under pleasant atmosphere. Teacher told us using a creative way to perform a child song in front of the class, all of us laughed so hard during class activity. I really like interactive and mutual teaching style.

Some talked about both functional and interpersonal dimensions of a pleasant experience with teachers:

Student 3: Well, I would say, for example, a teacher talked about an interview after classes. You know, we were all exhausted because we got up very early and attended to many lectures. At this time, the teacher discussed some issues partly related to study, but not too much, with us I mean we had some communication about some funny or non-academic things from outside classes, and this could bring me some wonderful experiences.

Student 4: There was once my teacher told our class that the task of that day was to write a piece of lyrics for a song. Then our group had spent more than an hour to complete our task and did the recording of the song. Afterwards, my teacher asked us to send the song to her as she said that our song is meaningful enough to let her share to others. I have feel that my teacher really cherish our job which have been done by paying much effort on it, which I really appreciate my teacher who was being respectful.

The answer from Student 2 indicated that class atmosphere and teaching style comprised the most pleasant part of his/her experience with the teacher. The answer from Student 4 suggests the importance of the teacher's expertise and morality, in students' experience.

Though responses from Student 3 and Student 4 mainly focused on the interpersonal dimension, all interpersonal activities happened in functional settings during class activities or assignments. As in the 'caring' question, students' attitude to the pleasant experiences with their teachers indicates their respect for teachers' position of authority. Teachers' expertise in terms of class discipline and their morality also contribute to students' pleasant memories.

#### *4.1.6.3 Theme 3: Class activeness*

One of the interview questions asked students about their classmates' responsiveness to teachers in class. Most students stated that interactions in class were not always active, or were not active at all:

Student 1: Not all of the students will response to the teacher's question which included me, we will become silence or just pretending that we are busying on something to escape the questions.

Student 2: I don't think [students are active], you know, their first response is keeping silent.

In general, they are not active enough.

Students explained, from their own perspective, why they did not engage with the teachers. Some found reasons from the functional aspect, stating that the difficulty of the questions asked by teachers is an important determinant of whether students respond to teachers or not. If the questions were challenging, the students need time to process:

Student 1: If the questions require time to understand and digest, classmates more prefer to keep quiet and think. If the questions are more obvious and direct, classmates will say the answer out in their seat.

Student 2: In fact, I believe their language proficiency is the main cause, you know, English is not their mother tongue. When teachers ask questions in English, they just can't make a response in seconds, and they need time to organize their answers logically without grammar mistakes, but that does not mean they have no ideas, they just need to make their fragmental ideas into a whole story.

In addition, students presented the mental process from the interpersonal perspective to explain why they did not engage with teachers:

Student 1: I mean they are all adults now, you know, they care about whether their answers are stupid or not, so they take a long time to think over.

Student 2: Some of them may be shy or even scared to answer, as they are not sure about the answer of the questions.

Data indicate that both functional and interpersonal reasons suggest a path for class activeness. Students try to explain away some interpersonal reasons, such as shyness, using functional excuses such as that they are not sure about the answer, which will be further explored in the following themes.

Apart from their own mental processes, students take on the perspective of teachers to evaluate class activeness, and most of the evaluations concern teacher expertise:

Student 1: In most of the occasions, our classmates are active and passionate to teachers' questions since teachers are always being skilful to catch attention to our classmates' interests.

Student 2: Teachers lose their patience and sometimes they just explain answers to them directly in order to save time.



The answers again focused on the functional dimension of the teacher role by relating class activeness to teachers' expertise in teaching and designing efficient class structure. Patience was mentioned in the answer by Student 2 and may suggest the teacher's morality, but it was quickly explained to be the teacher's functional duty to keep the class moving.

#### *4.1.6.4 Theme 4: Initiation*

There are actually two versions of the same question about students' initiation in class. Students were asked to describe a time when they offered useful suggestions in class, and others were asked about an experience when they made innovations or proposed a new idea in class. Both questions examine the willingness of students to initiate an interaction or even to question the authority of their teachers.

One student did not recall any time that he/she had initiated anything, and explained this from an interpersonal perspective:

Student 1: In my mind, I don't think I have that experience as I am really shy person and not confidence to raise up my hand, and talk in front of the class.

One student used examples of them answering questions or plan out assignments in an innovative way:

Student 2: Teacher told us to watch a video and take notes, then we shared the information and she marked down the point we made. She said we made some missing points and make a conclusion of each part of the content together.

Student 3: Most of our classmates thought that there were two weeks packed with assignments and presentations, so I proposed an idea to let the presentation groups take turns in that two weeks so that most of the presentations would not be clashing on the same day, which provided convenience to everyone. At the time, the teacher agreed and suggested us to discuss with other lecturers.

Like Student 2, Student 3, both are interacted with the teacher to make changes. However, Student 4 challenged the authority of the teacher by pointing out his/her flaws in conducting a final exam:

Student 4: I offered some suggestions about final exam, you know, there are about two sessions for review. Many teachers just use same approaches to help students go over lessons. For example, they just give a lot of hints or topics, so learners know the main contents in exams. I think teachers give too many tips, so exams become rote learning. When I told my teachers that, some of my classmates were angry because they wanted to pass exams easily. I explained to my teachers that when they gave too many hints, exams became guessing. I mean learner would guess what they needed to prepare, what contents were keys to high score. This is not meaningful at all. Exams should focus on learners' ability to analyse questions and solve them with what they have learned in classes, instead of guessing for half a month. If they make any mistake in the process of thinking over a fixed problem, how could they solve them in exams. This is especially true when teachers change a word or subject in a question, because the answers would be totally different. For example, if a teacher gives a hint about teaching approaches in learning, and learners just guess that teaching approaches are important, but the actual test is teaching approaches in learning second language as a child. Compared to what they prepare, their answers would be changed a lot to explore the problem accordingly. A meaningful exam should challenge learners' abilities and knowledge.

Student 4 provided the rationale for his/her intention to challenge the plan of the teacher. He/she was taking the perspective of the teacher and thinking of the functional duty to conduct a fair final exam. This response resonates with the discussions from previous themes, that students' respect and questioning of a teacher's authority exist only in the functional dimension, because of teachers' dominant status in academia.

#### *4.1.6.5 Theme 5: Favourite characteristics*

When asked to list their favourite characteristics in a teacher, students talked about either functional or interpersonal traits, or both.

One student focused solely on the functional dimension, indicating that a teacher's expertise in teaching made them their favourite:

Student 1: The biggest characteristics of my favourite teacher is having skilful teaching strategies which made me feel that she is an approachable person. She knew that how to discipline our class without making any feel guilty about always simply letting us realize what we should

do as a learner in the classroom, especially when our role as a teacher-to-be in the future.

Two students emphasized the interpersonal strength of their favourite teachers:

Student 2: When the first time I met her, I thought she was a really straight teacher and serious on everything as her face expression just made me feel scared. After a year and two, base on the process that I know her from class to texting through WhatsApp, she is a caring person who will try her best to help her students when they need help. She is an emotional person which I feel touched and I just feel like she is my role-model to become a better person and educator.

Student 3: Hmm, I would say patience is the most important. This is especially true in higher education, you know, learners always have some space to explore their interests, instead of just listen to teachers' talk. At this time, teachers should slow down and listen to learners' ideas patiently, instead of teaching them how to do or explaining definitions in the book. What's more, patient teachers should also be ready to help learner when necessary. When I was very young, all classes were top-down. I mean teachers just focused on delivering the classes, finishing exercises, and explains the answers, while learners just listened to what their teachers talked and to notes. Students did not need any support; they just needed some answers after finishing exercises. However, learners' roles have been changing, and they are more active than before. Teachers should know whether their learners feel it difficult to understand, whether they need further explanation by examples. Even though learners are not sure about that, teachers should listen to them and try to figure out whether they need any support. All in all, I think my favourite teachers are patient and supportive.

Though Students 2 and 3 both focused on the interpersonal characteristics of their teacher, their attitudes are different towards a teacher's functional duty. In Student 2's experience, his/her favourite teacher made the student feel cared for and empathetic through both functional and interpersonal interactions, while Student 3 thought that the interpersonal strength of teachers was more important than their function.

One student juxtaposed interpersonal characteristics with functional characteristics:

Student 4: First, she is caring, considerate and understandable. She is able to meet students' emotional needs and show empathy to students. Second, she is wise, skillful and knowledgeable. She is able to teach student in an interesting and effective way which can nurture a

student's learning motivation. And provide variety of class activity which help students think in different perspective and think out of the box. Third, she shows professional manner and image most of the time. She is able to be calm when talking to others.

In the third point, Student 4 talked about his/her favourite teacher always maintaining professional boundaries with students, suggesting that closeness may not be an important part of teacher–student relationship to him/her. The third point contradicts the first point, that teachers need to be interpersonally close to students in order to meet their emotional needs and show empathy. This contradiction resonates with previous discussions and suggests that, while most students put teachers' functional identity over their interpersonal identity, they may not think or act accordingly. The evidence supporting the importance of students' interpersonal interactions with teachers is as prominent as the evidence supporting the importance of teachers' function.

#### *4.1.6.6 Theme 6: Important factors in relationship*

In the final question, on the most important factor in the teacher–student relationship, students' answers unsurprisingly fell into both the functional and interpersonal categories.

One of the students stated that teachers' expertise in teaching should be considered first:

Student 1: Teachers' levels of teaching and profession should be the priority. I mean if learners think they can learn a lot in teachers' class, and it is worthy to listen to what they say; it is easier for them to have a closer relationship. For example, we need to spend three hours in every class, which is a long period. Students would pay attention to how teachers explain definitions, whether teachers can make them easier to understand, and that is to say, whether it is meaningful to spend three hours here with the teacher. If teachers just look at slides without any teaching strategies, learners would be disappointed. They would not respect the teacher inward since the teacher is not professional enough. From this perspective, the relationship between teachers and students should take teachers' teaching styles and strategies into account.

Other students drew attention to interpersonal characteristics:

Student 2: Interactive communication. Teachers and students need to get understanding of each other and build a good relationship in daily. Students know more about the teacher's personality, expectation and

boundary. So, students can meet teacher's requirement more easier. Also, the communication between family and teacher which about the culture, background, students' learning needs and talent also important of nurturing students' development. So that teachers can introduce the suitable activity to the students depends on their interest.

Student 3: It is all about the relationship that we have during the process. Also, the teacher will show her love, care and support to the student which made us to have a sense to belong in this school.

Student 4: Openness will be the most important factor in teacher-student relationship.

The above answers focus on the quality of communication between teachers and students. Recurring factors such as openness, care and support call attention to the prominence of the interpersonal in the relationship between students and teachers outside academia.

#### *4.1.6.7 Conclusion*

To summarize, responses in the student interviews confirmed that students' interactions with teachers are closely related to the factors examined in the quantitative analysis, including but not limited to respect to teachers' authority, the classroom atmosphere, the morality of teachers and teacher expertise. Qualitative data can always be divided into two dimensions when students describe their interactions with teachers: the functional dimension and the interpersonal dimension. The functional dimension focuses on how teachers serve the role of teaching and helping students with their academic achievements, while the interpersonal dimensions focus on how teachers and students communicate issues that are unrelated to work.

All students' responses to the above six themes touch upon both the functional and interpersonal dimensions of the teacher-student relationship, indicating that both dimensions are important in interactions. However, students' responses usually emphasized the functions of teachers more than their interpersonal values. This heavy emphasis on functional interaction with teachers can be attributed to students' respect for teachers' role of authority in academia.

Teachers' functional identity and interpersonal identity are interwoven through students' stories. Though many valued teachers' functional identities more than their interpersonal identity, they could not eliminate the influence of their interpersonal interactions with teachers. In many themes, interpersonal factors are nested under functional factors or are explained away by functional reasons.

Students pointed out that teachers' role was changing and extended beyond their functions of teaching and helping students in academic work. The quantitative data of students suggest that importance, authority, closeness and class atmosphere are the most important four factors contributing to trust between teachers and students. The qualitative data suggest that students' understanding and the focus of their relationship moderate how they interact with teachers. In the following section, quantitative methods will be applied to create a dynamic and unified model.

## **4.2 Analysis of teacher questionnaire and interviews**

### **4.2.1 Quantitative analysis**

Since the questionnaire for teachers was much simpler than that for students (8 questions versus 27 questions), no dimensionality-reduction pre-processing was needed, as for the student questionnaire.

There were two missing data points in the teachers' responses, both of which were for Q8; the missing data were not counted.

For the eight questions of Part A of the teacher questionnaire, the first seven were about the qualities of good students in teachers' eyes:

Q1. Good attitude in academic field. Take notes and pay attention to lecture.

上課認真聽講，專心做筆記，態度端正。

Q2. Outgoingness.

為人大方，開朗。

Q3. Politeness.

為人懂禮貌。

Q4. Often seeking advice for academic purposes, inquisitive learner.

常常在課餘時間向老師請教課業內容，充滿求知慾。

Q5. Making confrontation with the teacher in class.

在課堂上直接對老師的觀點提出反對意見。

Q6. Willing to accept help from teachers.

願意接受老師幫助。

Q7. Critical thinker. Not by-the-book type.

充滿批判思維，常常反對書本中的理論和觀點。

Those qualities were abstracted as: attention to academics (Q1); outgoingness (Q2); politeness (Q3); advice-seeking (Q4); confrontation to authority (Q5); closeness (Q6); and critical thinking (Q7).

The last question of Part A is about teachers' perception of their primary role. That question was:

Q8. Teachers' primary role is to convey knowledge to students.

老師的首要任務是教與學生知識。

#### *4.2.1.1 Descriptive statistics for HK teachers*

A total of 12 HK teachers participated in the survey. The means and standard deviations (SDs) of the responses of HK teachers for each question are given in the following table:

Table 15: Responses by HK teachers to each question

	<b>Mean</b>	<b>SD</b>
Attention to academics	4.4167	0.66856
Outgoingness	3.5833	0.66856
Politeness	3.8333	0.38925
Advice-seeking	3.8333	1.11464
Confrontation to authority	3.3333	0.65134
Closeness	3.3333	0.88763
Critical thinking	3.5833	0.90034
Primary role	4.1	0.56765

For the HK teachers, the most important quality in a good student is paying attention to academics. The next three most important qualities are politeness, advice-seeking and critical thinking. Outgoingness, confrontation of authority and closeness are less important than the other qualities.

#### *4.2.1.2 Descriptive statistics for UK teachers*

20 teachers from the United Kingdom responded to the questionnaire for teachers. The means and SDs for the eight questions are shown in the following table:

Table 16: Responses by UK teachers to each question

	<b>Mean</b>	<b>SD</b>
Attention to academics	3.55	0.68633
Outgoingness	3.5	0.68825
Politeness	3.7	0.57124
Advice-seeking	4.1	0.96791
Confrontation to authority	4.4	0.59824
Closeness	2.75	0.8507
Critical thinking	3.65	0.74516
Primary role	3.15	0.74516

For the UK teachers, the most valued quality in a good student is confrontation of authority. Next most valued are advice-seeking, critical thinking and paying attention to academics, three other important qualities. Closeness, outgoingness and politeness are the least-valued qualities, in the UK teachers' eyes.



#### 4.2.1.3 Cultural difference in general

After viewing the descriptive statistics in the above questions for the HK and the UK teachers, we need to know whether they gave statistically different answers to those questions. Since we have multiple dependent variables (the scores of those questions) and MANOVA could test several dependent variables simultaneously, it served as a suitable statistical tool for this testing.

The MANOVA test was conducted using culture as independent variable and the scores of the seven qualities of good students as dependent variables. The result showed that there was a significant cultural difference in teachers' valuing of the qualities for being a good student (Pillai = 0.788,  $F(7, 28) = 9.745$ ,  $p < 0.001$ ). The result indicated that the HK and UK teachers valued these qualities differently. To investigate how their values are different, we needed to test each quality in turn.

#### 4.2.1.4 Cultural difference in attention to academics

To statistically test the difference between the HK and the UK teachers regarding attention to academics, the independent t-test was employed. The difference in means of teachers' scores on attention to academics in cultural terms is in Figure 24:

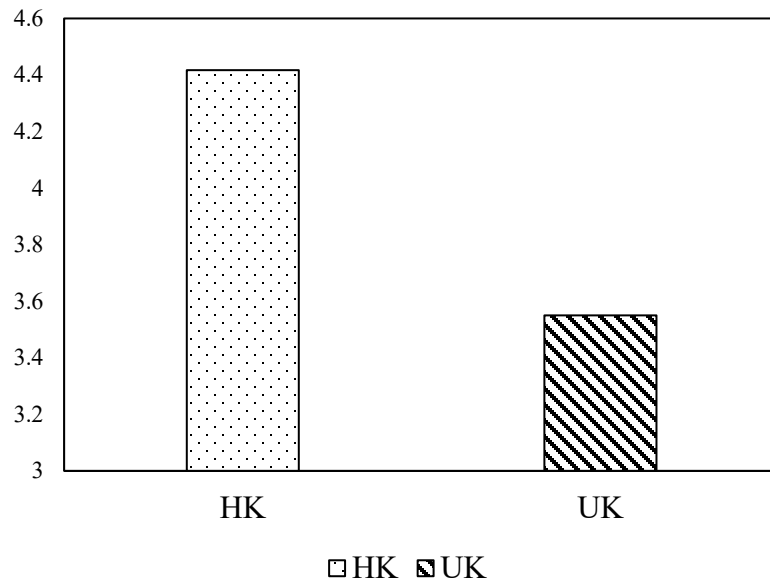


Figure 24: Means of attention to academics for HK and UK teachers

The cultural difference between the HK and UK teachers' value of students' attention to academics was found to be statistically significant (mean difference = 0.867,  $t(30) = 3.515$ ,  $p = 0.002$ ). This result indicated that the HK teachers put more value on it than the UK teachers, and they tended to regard students who paid considerable attention to academics as good students.

#### 4.2.1.5 Cultural difference in outgoingness

First, the independent t-test was used to statistically test the cultural difference in teachers' value of outgoingness as a quality of a good student. The means of scores of outgoingness given by the HK and the UK teachers are displayed in the following figure:

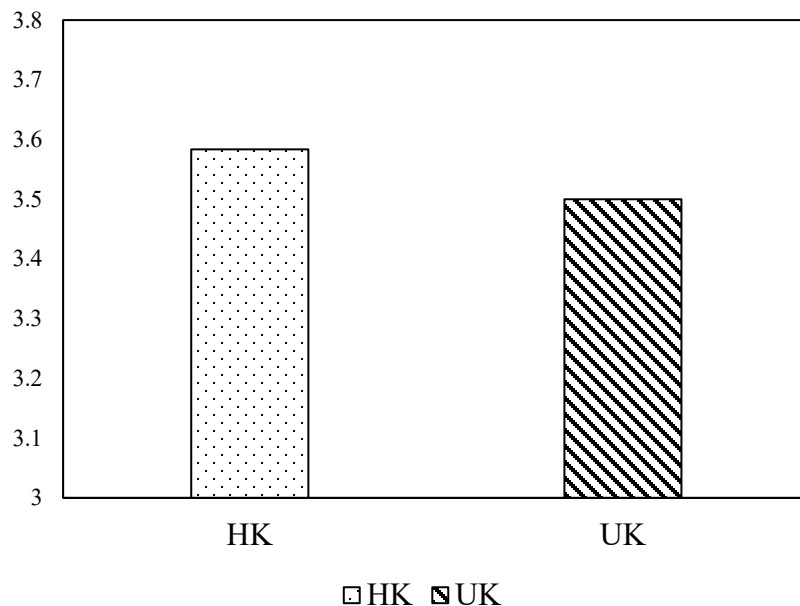


Figure 25: Means of outgoingness for HK and UK teachers

The statistical results showed that although the HK teachers' rating on outgoingness was a little higher than the UK teachers, this difference was not statistically significant (mean difference = 0.083,  $t(30) = 0.338$ ,  $p = 0.739$ ). This result suggested that the UK teachers might value students' outgoingness as a quality of a good student as much as the HK teachers.

#### 4.2.1.6 Cultural difference in politeness

Similarly, the statistical significance of the cultural difference in teachers' value of students' politeness as a good quality was tested using the independent t-test. The following figure gives the mean difference in teachers' score for students' politeness:

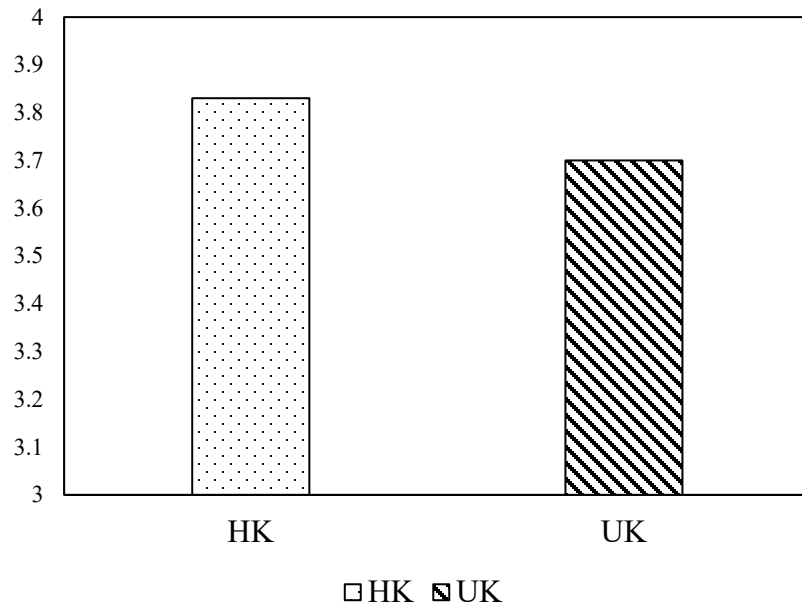


Figure 26: Means of politeness for HK and UK teachers

The difference in scores on students' politeness between the HK teachers and the UK teachers was not statistically significant (mean difference = 0.133,  $t(30) = 0.784$ ,  $p = 0.439$ ), suggesting that the HK teachers and the UK teachers valued students' politeness as a good quality to the same extent.

#### 4.2.1.7 Cultural difference in advice-seeking

The difference between the HK and UK groups in advice-seeking as a quality of a good student in teachers' eyes was tested statistically using the independent t-test. The means of the two groups in scores of advice-seeking are shown in the following figure:

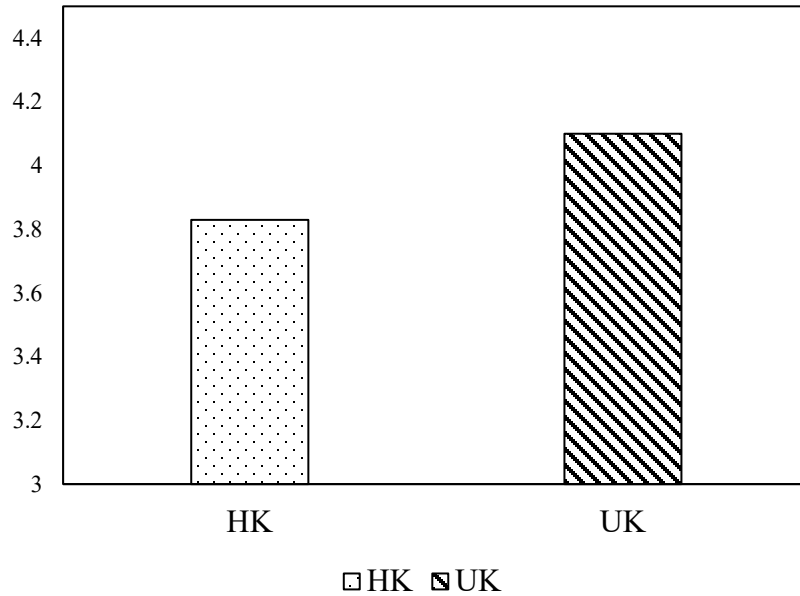


Figure 27: Means of advice-seeking for HK and UK teachers

Although there was a trend for the UK teachers to value students' advice-seeking behaviour more than the HK teachers, the difference in the scores between the HK and UK teachers was not statistically significant (mean difference = -0.267,  $t(30) = -0.688$ ,  $p = 0.499$ ). This result indicated that, although the UK teachers tended to value it more, the cultural difference in teachers' rating on advice-seeking was not statistically validated.

#### 4.2.1.8 Cultural difference in confrontation of authority

Similarly, whether teachers' value of students' confrontation of authority were different culturally was statistically tested by employing the independent t-test. The following figure gives the means of teachers' scores on confrontation of authority of the two groups:

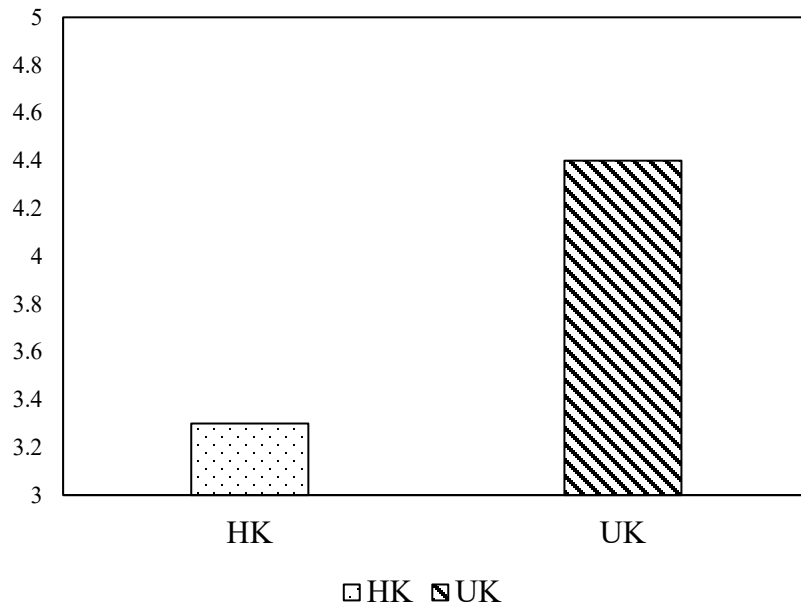


Figure 28: Means of confrontation of authority for HK and UK teachers

The cultural difference between the HK and UK teachers in the scores of confrontation to authority as a quality of a good student was statistically significant (mean difference = -1.067,  $t(30) = -4.622$ ,  $p < 0.001$ ), suggesting that the UK teachers tended to put more value on students' confrontation of authority than the HK teachers, and they tended to encourage students to question authority more than the HK teachers.

#### 4.2.1.9 Cultural difference in closeness

The cultural difference in teachers' value of students' expected closeness with teachers was also tested statistically using the independent t-test. The means of the scores of closeness by the HK and UK teachers are shown in Figure 29:

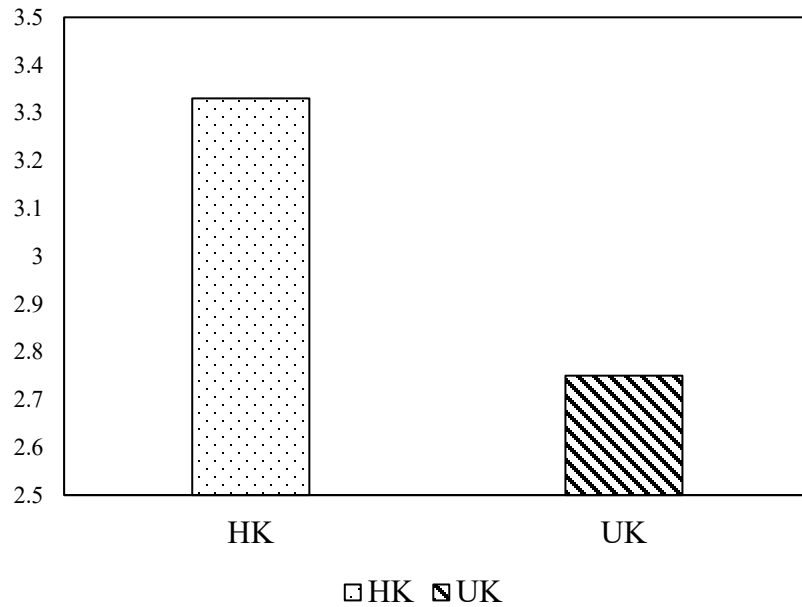


Figure 29: Means of closeness for HK and UK teachers

The cultural difference in the scores of expected closeness with teachers as a quality of good students was shown to be not statistically significant (mean difference = 0.5833,  $t(30) = 1.828$ ,  $p = 0.081$ ). Though there is an observed difference in the graph, the result indicated that the HK teachers put a similar value to the UK teachers on students' expected closeness.

#### 4.2.1.10 Cultural difference in critical thinking

The cultural difference in critical thinking as a quality of a good student between the HK and UK teachers was tested statistically using independent t-test. The means of the scores by the HK and UK teachers are displayed in the following figure:

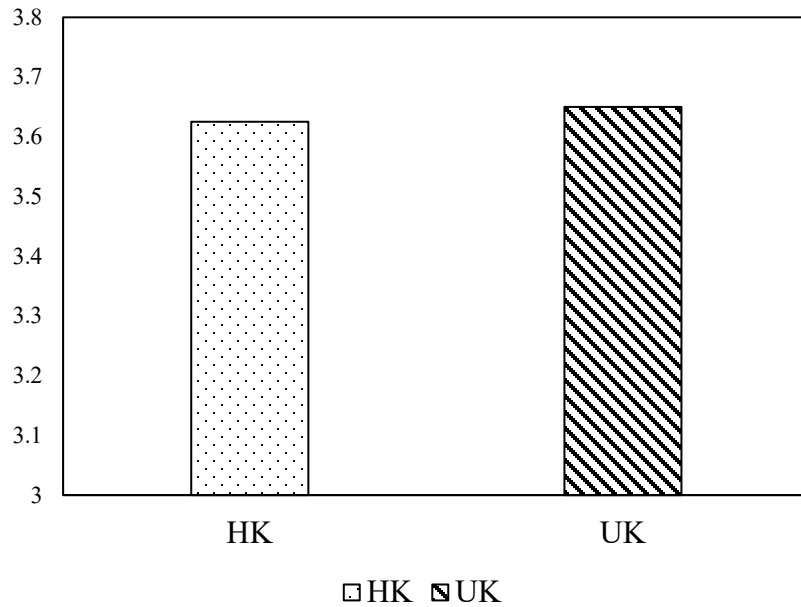


Figure 30: Means of critical thinking for HK and UK teachers

By observation, the difference in the scores of critical thinking as a quality of good students between the HK and UK teachers was very small (mean difference = -.067), and this observation was supported by the insignificant statistical result ( $t(30) = -0.216, p = 0.831$ ). The result indicated that the HK teachers might value students' critical thinking as much as the UK teachers.

#### 4.2.1.11 Cultural difference in primary role

Lastly, the cultural difference in the opinions on whether teachers' primary role is to convey knowledge to students was tested using independent t-test. The means of the scores given by the HK and UK teachers to this question are given below:

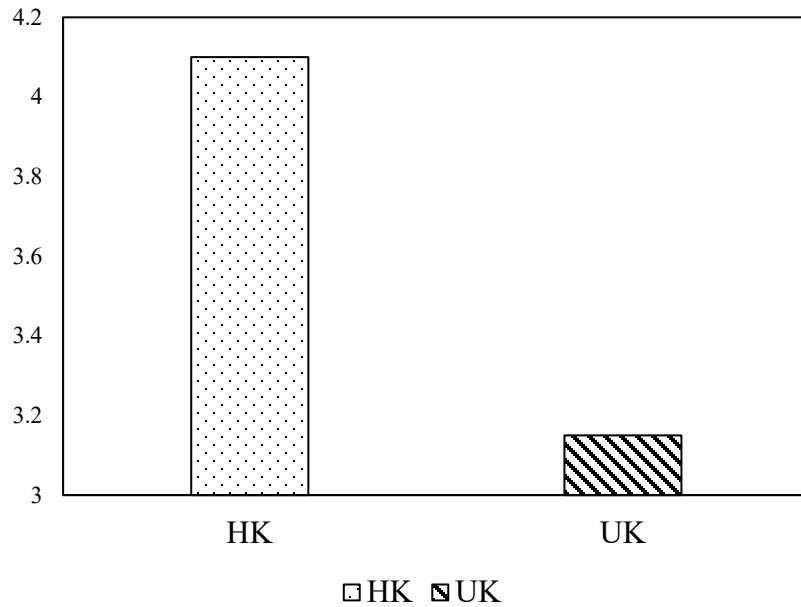


Figure 31: Means of primary role for HK and UK teachers

The HK teachers and UK teachers showed a great difference in whether they thought that conveying knowledge to students was their primary role, with a mean difference of 0.95. This difference was shown to be statistically significant ( $t(28) = 3.539$ ,  $p = 0.001$ ), suggesting that the HK teachers were more likely to consider that conveying knowledge to students was their primary role than the UK teachers did.

In conclusion, not all questions showed a statistically significant different response by the HK and UK teachers. The results suggest that the UK teachers were more likely than the HK teachers to value students' confrontation of authority, while the HK teachers put more emphasis on the academic: they tended to value students' academic achievement more and think more that conveying knowledge to students was their primary role than the UK teachers did.

#### 4.2.2 Qualitative analysis on interviews with teachers

Data from the interviews provided the study with more detailed information from the perspective of teachers to serve as an important supplement to the quantitative analysis above.



Four teachers were interviewed, and all were asked to answer the same 10 questions. They were encouraged to talk about their experience and encounters they had in their lives with any students, and to elaborate using examples.

The following qualitative analyses started with open coding to explore possible themes of students' experience with their teachers in each question asked. This exploratory process does not serve to generate new hypotheses but aims to support the results of the above quantitative analyses and find the underlying mechanisms of the teacher–student relationship.

#### *4.2.2.1 Theme 1: Teachers' function vs. interpersonal relationships*

As one of the major themes in the qualitative analysis of the student section, teachers described their encounters with students from two perspectives: academic interactions that imply a teacher's primary function of teaching; and interpersonal interactions outside academia. For example, the first question asked teachers whether they could recall any circumstances in which their students had cared for them.

Some of them answered from an interpersonal perspective:

Teacher 1: I'd receive little gifts from my students on Christmas and New Year.  
I felt very warm.

Teacher 2: They were able to show me they were aware of my condition, be it physically or mentally.

Other teachers answered the question from both a functional and an interpersonal perspective:

Teacher 3: I can see this best when students take another of my courses in the following semester. When it is an elective, I ask students why they choose the course and often students will say they chose it because of me. Of course, this is flattering although I wish students would also choose the course because of their interest in the subject. Naturally, you can also see a little student interest in the assessment forms (if there are comments). In some years, students also added me on Facebook, which could be seen as care (but this does not always happen).

Teacher 4: One of the main ways is receiving messages of thanks from students: this came in the form of written cards, thank-you notes, emails and through social media. Another way of care is congratulating me on events which are unrelated to work e.g. for my engagement to my wife, they congratulated me on social media via Facebook, and even created a post on the student web-page to issue congratulations.

Another question asked about a pleasant memory that teachers had had of their students, and some answered from a functional perspective:

Teacher 1: I feel very happy if I could successfully answer all of their questions. Yes, when students are not, just simply raising their hands and say, 'I don't understand something', but instead they really put some thoughts into a matter and then ask me a 'real' question. I felt happier because that's more like an interactive process which enable us to understand each other.

Some talked from an interpersonal perspective:

Teacher 2: In a kind of mentorship programme with an individual student, I was able to have a deep conversation about what the student experienced. We talked about our own life, pursuits and challenges.

Teacher 3: Taking photos and sharing food together at the end of a course.

Some talked from both perspectives:

Teacher 4: I once created a novel teaching method by creating an educational Escape Room for learning of 2nd year medical students in my institution. My students enjoyed it so much that they would post and share stories about it through social media, and eventually it was reported in the news and media due to their positive feedback. They even invited students from another institution to come and join my class to have the experience. I feel that the sharing of the happiness comes from the reward of hard work and thought put into teaching, which is returned to be tenfold by the happiness of my students. We took a number of 'selfie' photos of every participant and this remains a treasured collection for me.

It is interesting to note that when teachers were asked what kind of students they preferred, some of them talked about a student's academic work:

Teacher 1: Students who take initiatives in study.

Some talked about both academic work and interpersonal highlights:

Teacher 2: My favourite student is an active student and I will give them better participation grades. I think students should show some interest in the class. I also like reliable students who do what they say.

Some of them talked about students' interpersonal qualities and their representation in academic life:

Teacher 3: I like students who are serious, dedicated, cheerful, pay attention in class, contribute to the class in terms of discussion, accommodating and understanding when other classmates are not always performing well enough, etc.

Teacher 4: My favourite type of student is a combination of able and humble. I enjoy talking to those who are very capable of learning but also are willing to listen and discuss, without feeling the need to 'show off' their ability.

When the researchers asked teachers about the most important aspect in the student–teacher relationship, some teachers mentioned the functions of teachers for their students:

Teacher 1: I think it needs to be consistent and fair with the teacher willing to answer questions and open to student concerns. Students will appreciate the effort of the teacher if he or she is willing to help them along the way.

Some teachers simply gave answers like 'personal relationship' and wanted to 'cultivate better teacher–student/student–student relationships' to improve their teaching quality.

When teachers were asked what they would do if their students lied to them, some teachers answered the question by stating that lying would jeopardize a student's academic integrity:

Teacher 1: As I teach medical students, the issue of professionalism is particularly important and part of my teaching philosophy. Therefore, in the case of a student lying to me I feel it is my duty to call this out, not in a confrontational way necessarily, but just to identify that the lying has occurred. I would like to remind the students that, in this profession, honesty and integrity are important, but also to identify any reasons why they felt they could not tell me the truth and see how we could build a more trusting relationship going forward.

Teacher 2: Depends on the nature of the lie. If it's a careless lie I might let it slide. Like if you ask a student 'Did you read this article' and she

said 'I did' when actually she didn't, but there's no use in pursuing that lie.

Some teachers also addressed the interpersonal quality of students in their answers:

Teacher 3: I know that students lie to me. If I know it, I will aim to give them a worse mark, depending on what kind of lie it was and in which context. I will, however, not try to get angry about it. It's not worth it.

Teacher 3 presented the researchers with the two ways that he solved the problem: academically and functionally, he would deduct grades from the student's work, while from an interpersonal perspective he would try not to be angry with the student.

#### *4.2.2.2 Theme 2: Teachers' priority*

Some teachers in the interview saw their identity as a teacher as their primary identity and made student-related tasks their top priority.

When teachers were asked if they kept promises to their students, one teacher answered:

The majority of the time yes, when it comes to tasks e.g. reviewing their work, writing their references, giving them feedback, meeting them etc. One area where I have sometimes not kept my promise is the speed of co-writing journal papers – I have sometimes set a deadline for a first draft with them but due to being busy have not completed this on time.

This shows that he/she always responded in a timely manner to his/her students, which does not happen all the time with his/her other jobs and tasks (e.g. his/her own academic work).

Some teachers show an equivalent attitude to students and others in their lives in answering the exact same question:

I always strive to keep my promises not just to students. I believe it is important that you keep your word always because otherwise people will look bad at you. There must be some really important reason for me not to keep a promise and then I would apologize. I wish students would be the same but unfortunately not everyone is like this.

#### *4.2.2.3 Theme 3: Hierarchy between teachers and students*

During the interview, some teachers expressed that they were above their students in the hierarchy of their relationship, while some showed a more equal stance. Some of the teachers indicated a hierarchy between teachers and students by speaking in an egocentric way. They saw the interaction between teachers and students as more focused on the teachers' end, rather than as a joint effort of both parties.

When teachers were asked what they thought affected the relationship with students the most, one of the teachers responded that what the teacher values most and what they do, according to their belief, would be the most important factors. However, some teachers had the opposite attitude. When the same question was asked, they answered not only from a teacher's perspective but suggested what students could improve in their interactions.

Teacher 1: Just like I said before, if a student doesn't admit what he didn't understand in class, then I'd assume he understood what I taught. But if the student can't be honest about what he can or cannot understand, then I'm really unable to explain further. I try very hard to explain to them but sometimes we have trouble in communication, which should be two-way. but I feel most of the time it is only I who is trying, which makes me feel quite uncomfortable.

Teacher 2: Authenticity. I cannot emphasize this enough; I really believe that teachers do not have to do anything special to earn a student's respect and trust other than to be truly authentic to themselves and their profession. Style, humour and chatting are all helpful, but I have found that I build the respect and rapport with them because they know I give 100% of my efforts to my teaching. I make it clear to them that I arrive at work earlier and stay later than them, that I wake up at 6.30am every weekday to work and that I self-study Cantonese, online courses on data analysis and machine learning, outside of my work also. In this way, they feel I never ask them to go through something I am unwilling to do myself, and they have often commented that it forms the relationship of the role-model or inspiration. Authenticity comes from being in the journey together – my students and I are both learning all the time.

#### *4.2.2.4 Theme 4: Teachers' trust in students*

Some teachers do not trust their students. When teachers were asked whether their students did what they had asked, one of the teachers responded as follows, showing that he/she was not sure about his/her students' behaviour:

Usually students would do as they are told in terms of observable behaviours: e.g. in a lecture or practical they will be given a learning task and it would appear that they are busy doing it. It can be hard to distinguish when they appear to be busy, and when they are actually busy, however; for example with the use of digital devices, as we cannot see the screen, students could be using Mentimeter as instructed OR on YouTube, Facebook or work, or also not for work. This is hard to judge, but usually on very engaging tasks it is easier to see them working.

Another teacher was more straightforward about a similar experience, saying that he/she could tell only from a third-party assessment if his/her students were cooperating, not by relying on his/her feelings:

I don't really think they usually do what they are told unless it is tied to an assessment. This could be because their interest in the topic is not that high and they only want to do what they need to pass the course. For instance, few students do the assigned reading.

#### *4.2.2.5 Conclusion*

Because the size of the sample was small, the research did not compare teachers' answers according to their country. Similar to the responses in the student interviews, the four teachers described their interactions with students from both functional and interpersonal perspectives. They did not only look at their teacher role as being functional and interpersonal at the same time, but also saw interactions with students from these two perspectives. For example, they mentioned experience with students outside the institutions, and valuing students' interpersonal qualities.

Some teachers regarded their job of being a teacher as their primary identity. They valued interactions with their students highly and were responsive to their students' needs, before anything else. Some teachers treat their students the same as they treat their friends, family and colleagues, showing that they do not prioritize their teacher identity.

Some teachers see themselves as the more privileged party in the student–teacher relationship, and do not regard their students as having equal standing. This idea, on the one hand, could suggest a sense of authority in the values of teachers, and on the other hand it requires teachers to take more initiative and for the students to be more passive. Teachers who see their place as the same as their students showed researchers that the student–teacher interaction involves effort by both parties.

Last but not least, this study found that some teachers lack sufficient trust in their students. They were not confident to report on their interaction with students, and relied on third-party assessment. The results indicated an interpersonal distance between students and teachers and suggested that teachers may lack sufficient professionalism in working with students.

## **5. Discussion**

### **5.1 Summary of the results**

The present study aims to compare and contrast teacher–student trust relationships and the possible factors contributing to the differences. The methodologies of the present study include questionnaires and interviews. There were questionnaires for both students and teachers. In total, four groups of students responded to the questionnaire: first-year HK students, final-year HK students, first-year UK students and final-year UK students. In addition, two groups of teachers from Hong Kong and the United Kingdom respectively took part in the survey. The questionnaire had multiple formats, including five-point Likert-scale questions, ranking questions and open-ended questions. Finally, four teachers and four students were interviewed.

Various methods and analytical tools were used to analyse the data collected from the questionnaire and interviews. For the results from the questionnaire, quantitative methods such as the t-test, correlational analysis, linear regressions and SEM were used to analyse the data. For the results from interviews, qualitative methods such as content analysis were employed to analyse the data.

### **5.1.1 Summary of the results of the student questionnaire and interviews**

#### *5.1.1.1 Dimensions of the student questionnaire*

There were 27 questions in Part A of the student questionnaire, therefore it was necessary to detect its dimensions for ease of analysing the data and to understand the concept of students' trust in teachers.

The correlational patterns between the questions were explored by using the correlational matrices. Six dimensions were identified by the theoretical inference and the semantic relations of the statements in the questions, and were confirmed by confirmatory factor analysis (CFA). There were 27 questions in Part A of the student questionnaire, and in preprocessing these questions were divided into six dimensions, as follows:

- 1) Students' attitude to the importance of teacher–student relationship (importance);
- 2) Students' attitude to the importance of teachers' expertise on academia/teaching (expertise);
- 3) Students' attitude to the equality/authority of teacher (authority);
- 4) Students' expected closeness of their relationships with teachers (closeness);
- 5) Students' preference for class atmosphere (atmosphere);
- 6) Students' trust in teachers in interpersonal relationships (interpersonal trust).

To testify the statistical validity of above six dimensions, CFA was used. The overall goodness-of-fit was 0.852, which indicated that the model fit the data very well, meaning that the six-dimension constructs were supported statistically and could be used for further analyses.

The items belonging to those six dimensions are:

- 1) Students' attitude to the importance of teacher–student relationship:



Q1. I care very much about the interpersonal relationship between me and my teachers.  
(我很在意我和老師們的關係)

Q10. It is not necessary to build trust between me and my teachers. (建立和老師們的信任不是特別需要)

Q23. Teacher–student relationship has influence on my academic results. (師生關係的好壞對我的學習成績有影響)

Q24. Teacher–student relationship has an influence on my mood. (師生關係的好壞對我的心情有影響)

2) Students' attitude to the importance of teachers' expertise:

Q3. The expertise of a teacher is very important. (老師的學術專業程度非常重要)

Q4. The intelligence of a teacher is very important. (老師的智力非常重要)

Q7. Teachers should not interfere with students' private life. (老師不應該干涉學生的個人生活)

Q8. Teachers' primary role is to convey knowledge to students. (老師的首要任務是教與學生知識)

Q17. Versatile teachers deserve more respect and trust. (多才多藝的老師應該受到更多的尊重)

3) Students' attitude to the equality/authority of teacher:

Q11. I often raise my concern and questions to my teacher in class. (我常常在課堂上向老師提出疑問)

Q12. I would confront my teacher in class if I think his/her explanation of a certain point is wrong. (當我認為老師錯了，我會直接指出他/她的錯誤)

Q13. I don't think confronting my teacher directly with regard to the teaching content in class will humiliate him/her. (我不認為指出老師的錯誤會讓老師難堪)

Q14. My teacher would hate me if I made him/her realize his/her mistakes in class in front of other classmates. (老師會因為我指出錯誤而討厭我)

Q18. Teachers are authoritative; I have to be humble in front of them to show my respect of them. (老師有師嚴，我應該在老師面前表達尊卑)

Q20. I would rather consider my relationship with my teachers as equal. (我認為我和老師的地位是平等的)

#### 4) Students' expected closeness of their relationships with teachers:

Q5. My teacher should always manifest a high moral standard. (我的老師應該是道德的楷模)

Q6. I am inclined to teachers with parental characteristics. (我會更喜歡像父母親一樣的老師)

Q19. Being considerate is important in teachers. (細心體貼對於老師來說很重要)

Q21. Racial discrimination and other scandals of the university will reduce my trust in the faculty. (種族歧視的老師會影響我對其所在教育機構的信任度)

#### 5) Students' preference for class atmosphere

Q9. I enjoy relaxed and free atmosphere in class. (我喜歡自由散漫的課堂)

Q15. I enjoy group/whole-class discussion in class. (我喜歡課堂的團隊討論)

Q16. I think group discussion is effective. (我認為團隊學習很有效率)

6) Students' trust in teachers in interpersonal relationships:

Students' trust in teachers in interpersonal relationships was captured by the behaviours mentioned in the following four questions:

Q22. I will initiate communication with teachers. (你會主動與老師交流)

Q25. The relationship between me and my teachers is great. (我與老師的關係非常好)

Q26. I often seek advice from my teachers. (我會常常向老師尋求建議)

Q27. I am willing to communicate more with my teachers in my leisure time. (我願意在課餘時間和老師交流)

The overall goodness-of-fit was 0.852, which indicated that the model fit the data very well, meaning that the six-dimension constructs were supported statistically and could be used for further analyses.

#### *5.1.1.2 Correlational analyses between authority, importance, class atmosphere, closeness, expertise and trust*

After the identification of six dimensions, a preliminary study on the affecting factors on students' trust in teachers was conducted. The goal was to establish the effects of authority, importance, closeness and class atmosphere on students' trust in teachers. Five hypotheses were established:

Hypothesis I: Students who think the teacher–student relationship is important tend to show more trust in their teachers (i.e. importance affects trust positively).

Hypothesis II: Students who think teachers are the authority tend to show less trust in their teachers (i.e. authority affects trust negatively).

Hypothesis III: Students who think teachers should be considerate tend to show more trust in their teachers (i.e., closeness affects trust positively).

Hypothesis IV: Students who prefer an active and efficient class atmosphere tend to show more trust in their teachers (i.e. class atmosphere affects trust positively).

Hypothesis V: Students who think teachers' expertise is important tend to show more trust in their teachers (i.e. expertise affects trust positively).

All five hypotheses were supported by the results of statistical testing, using Pearson's correlational coefficient.

First, the findings supported that students' attitude to the importance of the teacher–student relationship affected their trust in teachers positively. In other words, the more important the students think that the teacher–student relationship is, the more the students trust their teachers.

Second, the findings supported that students' attitude to the authority of the teacher affected their trust in teachers negatively. In other words, the more that the students feel that their teachers are authoritative, the less likely it is that they will trust their teachers.

Third, the findings supported that students' expected closeness of their relationships with teachers affected students' trust in teachers positively. This means that the more that the students expect a close relationship with their teacher or expect the teachers to be considerate of them, the more likely it is that they will trust their teachers.

Fourth, the findings supported that students' preference for class atmosphere affected students' trust in teachers positively. In other words, the more that the students prefer an active and autonomous class atmosphere, the more likely it is that they will trust their teachers.

Lastly, the findings supported that students' attitude to the importance of teachers' expertise on academia/teaching affected students' trust in teachers positively. To put it in another way, the more important that the students think teachers' expertise in academics or teaching is, the more likely it is that the students will trust their teachers.

#### *5.1.1.3 Impacts of culture and year of attendance on trust (Part A)*

After exploring the effects of importance, authority, closeness, class atmosphere and expertise on students' trust in teachers, group information was used to test the impact of culture and the year of attendance on students' trust in teachers. In addition, the difference in factors such as importance and authority by culture or by the year of attendance was tested statistically.

The regional or cultural effect, the effect of the year of attendance and the interaction between culture and year of attendance on several factors were tested using ANOVA separately.

First, the effects of region and year of attendance on the differences in students' trust in teachers were tested. The result was that, although there was a trend for the UK students to have more trust in their teachers and the HK and UK students showed a different pattern of trust in teachers depending on whether they were first- or final-year students, these effects were not statistically significant.

Second, the effects of region and the year of attendance on the differences in students' attitude to the authority of teacher were tested. As a result, differences were observed due to region (the HK students tended to show more respect for teachers' authority) was statistically significant. Though, due to interaction of region and the year of attendance (the HK final-year students showed more respect for teachers' authority, while the UK first-year students tended to show more respect for teachers' authority), was not statistically significant.

Third, the effects of region and the year of attendance on the differences in students' attitude to the importance of teachers' expertise on academia/teaching were tested. It was observed that the UK students gave higher scores for the importance of teachers' expertise than the HK students, though the effect was not statistically significant. Further, the final-year students were found to give higher scores for the importance of teachers' expertise than first-year students, yet the effect was not statistically significant. Although, the results suggest that the final-year students think teachers' expertise on academia/teaching is more important than the first-year students do.

Fourth, the effects of region and the year of attendance on the differences in students' attitude to class atmosphere were tested. The UK students preferred a freer classroom atmosphere than the HK students. The year of attendance did not show a statistically significant difference in students' preference for classroom atmosphere. Moreover, the interaction of region and the year attendance was not found to be statistically significant.

Fifth, the effects of region and the year of attendance on the differences in students' expected closeness of their relationships with teachers were tested statistically using ANOVA. The result revealed a tendency for the UK students to give higher scores for their attitude to teacher–student closeness, but the effect was not statistically significant. Therefore, the effects of region and the year of attendance on students' expected closeness of their relationship with teachers were not statistically conclusive.

Lastly, the effects of region and the year of attendance on the differences in students' attitude to the importance of the teacher–student relationship were tested. The UK and HK students showed different patterns in their attitude to the importance of the teacher–student relationship: for the HK groups, the first-year students tended to give a higher level of importance to the teacher–student relationship; for the UK groups, it was the final-year students who were more likely to think the teacher–student relationship was important. However, the observation was not statistically significant, implying that the results for effects of the region and the year of attendance on students' attitude to the importance of teacher–student relationship were statistically inconclusive.

To summarize, although interesting patterns about how culture and the year of attendance affected trust, authority, expertise, closeness and importance were observed, most of the observations were not statistically significant. This may be attributed to the relatively small sample size and the relatively large variance within groups. The significant effect found in this part of study was 1) the impact of culture on students' attitude to the class atmosphere: that is, the UK students tended to prefer a free class atmosphere and group discussion than the Hong Kong students did; 2) the impact of culture on students' attitude to the authority of teacher: that is, the Hong Kong students tended to show more respect for teachers' authority than the UK students did.

#### *5.1.1.4 Impacts of culture and year of attendance on trust (Part B)*

Although many observed cultural and year-of-attendance effects were not statistically significant in the questions in Part A of the student questionnaire, there were also ranking questions in Part B about the factors contributing to students' trust of teachers. The effects of region and the year of attendance on the difference in these contributing factors were studied using statistical models. The ranking results were transformed to equal-interval scale type data so that more statistical models could be used. Those contributing factors involved in Part B include:

- A. Teachers' intelligence
- B. Teachers' expertise
- C. Teachers' moral standards
- D. Teachers' figure of authority over students
- E. Teacher sets strict classroom discipline
- F. Teacher imposes heavy workload on students
- G. Teachers' teaching style.

ANOVA was used to test the significance of the impact of culture and the year of attendance on the above seven factors in terms of their importance to students' trust in teachers.

First, the significance of the impact of culture and the year of attendance on the importance of teachers' intelligence, as a factor contributing to students' trust in their teachers, was tested. The result was that the UK students put much more value on teachers' intelligence than did the HK students, and that the main effect of region was statistically significant. No effect from the year of attendance was found.

Second, the significance of the cultural and year-of-attendance impact on the importance of teachers' expertise as a factor contributing to students' trust on their teachers was tested.

It was observed that final-year students tended to value teachers' expertise more than first-year students, though the observation was not statistically significant. No effect from the year of attendance or the interaction between region and year of attendance was found. Therefore, the results on the impact of the importance of teachers' expertise as a factor contributing to students' trust in teachers were statistically inconclusive.

Third, the significance of the cultural and year-of-attendance impact on the importance of teachers' moral standards as a factor contributing to students' trust in their teachers was tested. The results statistically supported that the HK students valued teachers' moral standard much more than the UK students did. No effect from the year of attendance or the interaction effect between region and year of attendance was found.

Fourth, the significance of the impact of culture and the year of attendance on the importance of teachers' figure of authority over students as a factor contributing to students' trust in their teachers was tested. From the ANOVA results for the main effect of regional impact on teachers as a figure of authority, we can conclude that the HK students put more value upon authority over students than the UK students did.

Fifth, the significance of the impact of culture and the year of attendance on the importance of teachers' strictness in classroom discipline as a factor contributing to students' trust in their teachers was tested. The results showed that teachers' strictness was valued more by the HK students than by the UK students, and the difference was statistically significant. In other words, the HK students were more likely to think teachers' strictness in classroom discipline was an important factor affecting their trust in teachers than the UK students.

Sixth, the significance of the impact of culture and the year of attendance on the importance of having a heavy workload imposed by teachers as a factor contributing to students' trust in their teachers was tested. The effects of region were found to be statistically significant while the year of attendance were not: the regional effect showed that the HK students put more value on the heaviness of class workload imposed by teachers than the UK students did.



Lastly, the significance of the impact of culture and the year of attendance on the importance of teachers' teaching style as a factor contributing to students' trust in their teachers was tested. The result was that the cultural impact on teaching style was found to be significant; specifically, the HK students were found to be more likely to think teachers' teaching style was an important factor in their trust in teachers than the UK students did.

To summarize, regional differences were found for several factors that contribute to students' trust in teachers: the UK students valued teachers' intelligence more than HK students did; on the other hand, the HK students put more value on teachers as a figure of authority (not statistically significant though tended to), their moral standards, strictness of class discipline, the heaviness of their workload and teaching style than the UK students did. Other than that, the HK and UK students put almost equivalent value on teachers' expertise.

#### *5.1.1.5 Factors contributing to students' trust in teachers*

Although the above analyses tested the effect of region and the year of attendance on the factors contributing to trust, the statistical tests were conducted on these separately. Therefore, the relative importance of those factors could not be established directly and no general model constructed to take all those factors into consideration and remove any redundant factors. To solve this problem, linear regression was employed to show the factors' relative importance and generate a model of all the validated factors.

First, a full linear regression model was established to explore the relative importance of the factors involved in Part A of the student questionnaire. In the model, trust was set as the dependent variable, and all other factors were set as the independent variables: region, the year of attendance, students' attitude to the importance of the teacher-student relationship (importance), students' attitude to the importance of teachers' expertise on academia/teaching (expertise), students' attitude to the authority of teacher (authority), students' expected closeness of their relationships with teachers (closeness) and students' preference for class atmosphere (class atmosphere).

Standardized regression coefficients (betas) were generated in the model and, by comparing the size of regression coefficients, we can see the relative importance of those independent variables. Using the standardized betas as the criteria, the most important factors contributing to students' trust in teachers are importance, authority, closeness and class atmosphere. Among these factors, importance, closeness and class atmosphere affected students' trust in teachers positively, while authority affected students' trust in teachers negatively.

Second, to investigate the relative importance of the contributing factors in Part B of the student questionnaire, a series of t-tests were conducted for the HK and UK students respectively. The results were that, for the HK students, the top four factors that contributed to trust in teachers were teachers' moral standard, teachers' expertise, teachers' teaching style and teachers' intelligence. The remaining three factors, namely teachers' figure of authority over students, teachers' strictness in class discipline and the heaviness of class workload, had lower priority.

By contrast, the UK students gave first priority to teachers' intelligence in evaluating the importance of the factors contributing to their trust in teachers. Another difference was that teachers' moral standards, which ranked first for the HK students, ranked only third for the UK students. Similar to the HK students, the UK students thought that teachers as a figure of authority, their strictness of class discipline and heaviness of the imposed workload contributed least to their trust in teachers.

Lastly, after exploring the relative importance of the factors contributing to students' trust in teachers, we needed to eliminate the less important factors from our model and keep the important ones. To achieve this goal, the backward elimination method of regression was adopted, namely establishing a full linear regression model at first and eliminating the least important factors at each iteration until the model fit falls significantly.

As a result, the final model includes students' attitude to the importance of the teacher–student relationship (importance), students' attitude to the authority of the teacher (authority), students' expected closeness of their relationships with teachers (closeness) and students' preference for class atmosphere (class atmosphere). These factors could be

considered to be the most important factors in students' trust in teachers. The final model had a relatively good model fit, with an R squared of 0.35.

#### *5.1.1.6 A unified model using structural equation modelling*

After exploring the relative importance of the factors contributing to students' trust in teachers, the next step was to explore how these interacted to affect students' trust in teachers. This is because the affecting processes could be complex and dynamic, and may interact with each other to have a final impact on trust.

SEM was used to build models to reflect the complex and dynamic interaction of factors. SEM is a statistical tool that takes the variance-covariance matrix of observed variables as input and models the relations between factors and variables and the complex interplay between factors.

To account for such processes, two models were proposed:

The first model is referred to as the *importance-mediated model*. This model hypothesizes that students' expected closeness of their relationships with teachers (closeness), students' attitude to the authority of teachers (authority) and students' preference for class atmosphere (class atmosphere) affect their attitudes to the importance of the teacher–student relationship, and then the importance affects students' trust in teachers. In other words, closeness, authority and class atmosphere affect students' trust in teachers both indirectly and via the mediation of importance.

The second model is referred to as the *closeness-mediated model*. This model hypothesizes that the other factors directly affect students' trust in teachers and also indirectly affect it through the mediation of closeness; that is, the students' attitudes towards the importance of the teacher–student relationship (importance), students' attitude to the authority of the teacher (authority) and students' preference for class atmosphere (class atmosphere) affect students' expected closeness with teachers first, and then their expected closeness with teachers affect their trust in teachers.

Two SEM models were established respectively for above two models, one as the baseline model (without any mediation). Both the importance-mediated model and closeness-

mediated model were compared to the baseline model by model-fit indices. The test of chi-square change was not able to find which model was better. However, the BIC index suggested that the closeness-mediated model was better, because it secured a greater improvement in the BIC index than the importance-mediated model. Therefore, the closeness-mediated model was selected as the best fit model. The model structure and relevant parameters are shown in the following figure:

Figure 32: Closeness-mediated model

In this final model, we make several conclusions about the affecting processes:

First, students' attitudes to the importance of the teacher–student relationship (importance), students' attitude to the authority of the teacher (authority) and students' preference for class atmosphere (class atmosphere) affected students' expected closeness with teachers (closeness) positively. In other words, if students think that the teacher–student relationship, that teachers being a figure of authority over students and teachers' creation of an active and efficient class atmosphere are important, they are more likely to expect a close relationship with their teachers.

Second, the direct impact on students' trust in teachers (trust) by students' attitudes to the importance of the teacher–student relationship (importance) and their preference for class atmosphere (class atmosphere) were positive, while the direct effect of their attitude to the authority of teachers (authority) was negative. These results imply that if students think that the teacher–student relationship and the creation by teachers of an active and efficient class atmosphere are important, they are more likely to have a higher level of trust in their teachers; on the other hand, if students think that teachers are a figure of authority over them, they are less likely to have a high level of trust in their teachers.

Third, coming after the impact from students' attitudes to the importance of the teacher–student relationship (importance), their attitude to the authority of teachers (authority) and their preference for class atmosphere (class atmosphere), there is a positive impact from students' expected closeness with teachers (closeness) on their trust in teachers (trust). The result implies that, after considering the impact of importance, authority and class

atmosphere, a student with a high level of expected closeness with teachers will still probably have a high level of trust in them.

After deciding on the final model to explain the mechanism for how factors interact to affect students' trust in teachers, based on the model the regional effect was examined. First of all, a moderating effect by region on the overall model was found to be significant, meaning that the HK and UK students differ in the degree to which the factors contribute to their trust in teachers. More specifically, the moderation effects suggest that there is a regional difference in how students' attitudes to teachers' authority (authority) and their expected closeness with teachers (closeness) affect their trust in teachers. Overall, for the HK students, students' attitude to teachers' authority (authority) and their expected closeness with teachers (closeness) affected their trust in teachers to a greater extent than for the UK students.

There were regional differences in how students' attitudes to the importance of the teacher–student relationship (importance) and their preference for an active and efficient class atmosphere (class atmosphere) affected their expected closeness with teachers (closeness), which would also affect students' trust in teachers, ultimately.

To summarize, it was found that the closeness-mediated model was a better model, as it fitted the data better. In other words, factors including importance, authority and class atmosphere affected students' trust in teachers both directly and indirectly via the mediation of their expected closeness in their relationship with teachers. A regional difference was observed in the extent of the interactions between these factors.

#### *5.1.1.7 Qualitative analyses on the interviews with students*

Qualitative analyses were conducted on the data collected from interviews with students from the United Kingdom and Hong Kong.

In general, both the HK and UK students confirmed that their interactions with teachers were closely related to the factors explored, such as teachers' authority, the classroom atmosphere, the morality of teachers and teacher expertise. Two dimensions of answers emerged from students' responses in the qualitative interviews: a functional dimension

and an interpersonal dimension. The functional dimension focused on the professional teaching and learning relationship between teachers and students, such as teachers' role of teaching, helping students to achieve academic goals, and so on. The interpersonal dimension focused on the teacher–student interaction outside the academic setting and communication around topics that were unrelated to work.

All responses from the HK and UK students about the themes – teachers' authority, classroom atmosphere, the morality of teachers and teacher expertise – touched upon both the functional and interpersonal dimensions of the teacher–student relationship, suggesting that they were interdependent in teacher–student interactions. Students usually brought up more functional dimensions of their interactions with teachers than interpersonal dimensions. Such emphasis on the functional role of teachers and students might be attributed to students' respect for their teachers, as well as teachers' authority in academia.

The functional dimension was always interwoven with the interpersonal dimension: despite the fact that students laid heavy emphasis on the functional interaction between them and their teachers, they could not eliminate the interpersonal dimension from their responses. Besides directly addressing interpersonal contact with teachers, some interpersonal factors in students' response were included in their functional dimension answers or were provided in support of the function of their interactions.

Students perceived an everchanging role for teachers that extended beyond the functions of teaching. The quantitative data on students suggest some important factors, such as importance, authority, closeness and class atmosphere, as contributing to the trust between teachers and students.

### **5.1.2 Summary of results of teacher questionnaire and interviews**

Similarly, two groups of teachers from Hong Kong and the United Kingdom respectively took part in the survey on teachers' trust in students and how they perceive their relationship with students. Moreover, two HK teachers were interviewed on their relationship with students and their opinions on teacher–student trust.

#### *5.1.2.1 Quantitative analyses on teachers' questionnaires*

There were eight questions in the questionnaire for teachers. The first seven questions were on the qualities of a good student, in teachers' eyes, and the last was on teachers' views on their primary role. The seven candidate qualities were attention to academics, outgoingness, politeness, advice-seeking, confrontation of authority, closeness and critical thinking. The significance of regional difference to these seven qualities and teachers' views on their primary role were tested separately using independent t-tests.

First, whether the HK and UK teachers differed in the value they accord to attention to academic work as a quality of a good student was tested using t-test. The results showed that the HK teachers put more value on students' attention to academic work than UK teachers did, and they tended to consider a student who paid plenty of attention as a good student.

Second, whether the HK and UK teachers differed in their value of outgoingness as a quality of a good student was tested using t-test. The result was that the HK teachers' rating of outgoingness was a little higher than the UK teachers' rating, but the difference was not statistically significant. Therefore, the regional effect of teachers' taking students' outgoingness as a quality of a good student was inconclusive.

Third, whether the HK and UK teachers differed in their value of politeness as a quality of a good student was tested using t-test. The results showed that they valued students' politeness as a good quality to the same extent.

Fourth, whether the HK and UK teachers differed in their value of advice-seeking as a quality of a good student was tested using t-test. Although it was observed that the UK teachers tended to value students' advice-seeking behaviour more, the regional difference in teachers' ratings was not statistically validated. Therefore, the effect of region on advice-seeking was inconclusive.

Fifth, whether the HK and UK teachers differed in their value of confrontation of authority as a quality of a good student was tested using t-test. The result is that the UK teachers

tended to put more value on students' confrontation of authority than the HK teachers, and they tended to encourage students to question authority more than HK teachers.

Sixth, whether the HK and UK teachers differed in their value for students' expected closeness with teachers as a quality of a good student was tested using t-test. The results suggested that the HK teachers put more value on students' expected closeness with teachers than UK teachers, and they tended to view students who liked to receive help from teachers as good students.

Seventh, whether the HK and UK teachers differed in their values on critical thinking as a quality of good student was tested using t-test. No significant difference in teachers' values on critical thinking was found, implying that the HK teachers value students' critical thinking as much as the UK teachers.

Lastly, whether the HK and UK teachers differed in taking conveying knowledge as their primary role was tested using t-test. The results showed that the HK teachers were more likely to consider conveying knowledge to students as their primary role than the UK teachers.

To summarize, the HK teachers tended to value students' attention to academic work and expected closeness with teachers more than the UK teachers; the UK teachers tended to put more value on students' confrontation of authority and advice-seeking behaviour than the HK teachers; all the teachers put a similar value on students' outgoingness, politeness and critical thinking. In addition, the HK teachers were more likely to consider that conveying knowledge to students was their primary role than the UK teachers did.

#### *5.1.2.2 Qualitative analyses on teachers' interviews*

Qualitative analyses were conducted on the data collected from four interviews with teachers from the United Kingdom and Hong Kong. Similar to students, the four teachers in this study described their interactions with the students from both functional and interpersonal perspectives. They not only looked at their teacher role as being functional and interpersonal at the same time, but also saw their interactions with students from the



two different perspectives. For example, they mentioned experiences with students outside the institution and valuing students' interpersonal qualities.

Much consideration was given to teachers' multiple identities. Some teachers considered their primary role and identity to be teachers, as opposed to friends or mentors to their students, or other identities. These teachers valued their interactions with their students highly and were responsive to their needs over other calls on their attention. Some other teachers adopted roles, such as friends, with their students. They treated their students the same as they treated their friends, family and colleagues, showing that they did not prioritize their teacher identity.

Teachers also reported their view on teachers' place in their relationship with students. Some teachers perceived themselves as the more privileged party in the student-teacher relationship, in that they did not regard students as having an equal footing with themselves. This idea could suggest a sense of authority in teachers' values, on the one hand; on the other, it required teachers to take more initiative, while the students were more passive. Teachers who saw their place as the same as their students showed that the student-teacher interaction required effort by both parties.

Last but not least, this study found that some teachers lack sufficient trust in students. They were not confident to report on their interactions with students without relying on a third-party assessment to evaluate the level of trust. This might suggest an interpersonal distance between students and teachers, as well as teachers' insufficient professionalism with students.

## **5.2 Theoretical implications and contributions**

The present study generated very rich data about the relationship between students and teachers, the factors contributing to students' trust in teachers, how students build trust in teachers and how teachers perceive students' trust in them in both the Eastern and Western cultural traditions. Those data are valuable in enriching our perspectives of the cultural difference in teacher-student trust, and how cultural background influences the bonding process between teachers and students.

This section will discuss how the results of the present study contribute to the literature and theoretical systems. First, the major findings in previous studies will be reviewed, including in education, the teacher–student relationship and trust between students and teachers, with a background of both Eastern, or Confucian culture and Western, or Socratic culture. Next, the theoretical meanings of the important concepts identified in the present study, such as students’ expected closeness in their relationships with teachers and students’ views on teachers’ authority, will be discussed using the framework of the literature in this field. Third and most importantly, the major findings, especially cultural differences in the factors contributing to teacher–student trust and the important implications brought by those findings, will be discussed. Last, based on the findings in the current study, practical advice will be proposed on improving teacher–student relationships, especially how to increase students’ trust in teachers and thereby improve the effectiveness of teaching.

### **5.2.1 Reviews on previous findings**

The current section looks at past research on trust in Eastern and Western cultures, contextualizes the findings in the literature and discusses the theoretical implications of the present findings.

#### *5.2.1.1 Literature on teacher–student trust in Eastern culture*

Two thousand years ago, Confucius and his disciples established an entire system of ideology about how education should work. Since the promotion of Confucian ideology by Dong Zhongshu, a follower of Confucius, to the whole country in the Han Dynasty, Confucius’ ideas on education have been the dominant ideology in China for more than two thousand years.

Confucius himself was an educator; he had more than three thousand students. According to his practice in educating people, he had a system of rules about the ideal teacher–student relationship, and he attempted to apply these rules to his interactions with students. The main idea of education for Confucius can be summed up in four words: 文 principle; 行 practice; 忠 loyalty; and 信 trust. Trust is to keep people trustworthy, to keep their promises and to win the trust of the people (Confucius, 1979). More specifically, in the teacher–

student relationship there are four important elements in Confucius' ideas that would facilitate teacher–student trust: mutual respect between teacher and students; caring about students in daily life; a liberal academic atmosphere; and educating students according to their competence.

First, Confucius thought that there should be equality in the relationship between teachers and students. Teachers might be more knowledgeable in some academic fields just now; however, their students could be comparable or even exceed them in these fields after years of study. Moreover, students might have a better understanding of the knowledge or principles from their own perspective. Therefore, teachers should communicate with their students from a position of equality in discussing academic issues.

Second, Confucius addressed the importance of caring for students in daily life. In ancient days, the students lived in Sishu (私塾) with their teachers, so the teachers had a close relationship with them. The teacher–student relationship was as close as a father–son relationship, and students were indeed asked to treat their teachers as their father. Confucius took care of his students, even over details of their personal lives.

Third, Confucius encouraged a liberal academic atmosphere in his discussions with his students. Confucius discussed plenty of academic problems during his daily instruction and his travels to other nations. He encouraged his students to think and answer those problems on their own, and only after his students had stated their opinions on these problems would Confucius comment on their views and express his own thoughts. He did not think that he was absolutely superior to his students in any field, and he liked to argue with and to guide them if there were discrepancies in their opinions.

Lastly, Confucius adopted different teaching styles for different students. He understood that there were variations in their competencies and backgrounds, and that these would affect how the students would learn from him. Therefore, he decided to adopt different methods of teaching in communicating with them so that the students' academic work would be the best.

To summarize, Confucius actually adopted a method of liberal education, even a student-oriented approach, in his ideology of education. He advocated teacher–student equality, encouraged liberal discussions and took much care of students’ lives. However, in promoting Confucian educational ideology, changes were later made to his ideas.

In the Han Dynasty, Dong Zhongshu, a follower of Confucius, successfully convinced the Emperor to adopt Confucian ideology as the national ideology and promote the ideas across the whole country. Afterwards, in the process of establishing a whole-country system of Confucian education in the subsequent millennia, there were transitions from the original principles so that they no longer totally aligned with Confucius’ original ideas.

First, in the Sui Dynasty, a whole-country system was established to select candidates to become officials through examinations on Confucius’ classical works. Thereafter, the only path for ordinary people to take part in politics was through these examinations. So Chinese people have a deeply held idea that the results of examinations are extremely important and are connected to a change in social status for the whole family. Therefore, the academic performance of students is still strictly addressed in current Chinese society, and those with relatively poor academic performance face considerable pressures from their parents and society.

Second, because education became much more important in the Han Dynasty, the status of teachers increased. After decades of changes, the authority of teachers was firmly established (Pan Li-Yong, 2012). Because there were only official and absolutely correct answers to the questions in the examinations, teachers usually set strict criteria on how to interpret the Confucian classics, and they did not seem to encourage liberal discussion. To make sure the official interpretations were taught, the Chinese teachers established themselves as figures of authority over students to convey this knowledge.

After 1840, starting with Britain, many Western powers came to China, and Western values, including those on the teacher–student relationship, were introduced. Hong Kong was invaded by Britain in 1842, and a British-style educational system was established. Although Hong Kong still kept many elements of traditional Chinese culture, its educational values have been influenced by Western educational values since then. In

1911, the last dynasty, the Qing Dynasty, collapsed and the Republic of China was established. Cai Yuanpei, the first Minister of Education Bureau of the new government, launched the New Culture movement, which welcomed Western cultural values of democracy and science, and the new system of Chinese universities was established. In Peking University, Cai promoted ideas of equality between teacher and students, a liberal and autonomous academic atmosphere and unity between teacher and students in changing the country's future.

Nowadays, the educational system in China has been built with reference to the Western educational system, and Western educational values have had an important influence on the teacher–student relationship, especially in Hong Kong. However, the interactions between teachers and students in China retain many characteristics of the ancient Chinese culture.

#### *5.2.1.2 Previous findings on teacher–student trust in Western culture*

The educational values and teacher–student relationship stemming from a Western cultural background also faced many transitions. The trust between teachers and students has been discussed since the time of the Ancient Greeks, namely the age of Plato and Socrates.

There are three important elements of education in Socrates' philosophy (Alfonsi, 2008): the power of questioning; self-generated knowledge; and interactive learning.

Socrates emphasized the power of questioning and thought that it was the approach to take to achieve truth. He was the first to introduce discussion and use the power of speaking to improve students' logical thinking. Socrates felt that he was wiser than another only in that he knew his limitations in knowledge and his own ignorance. He thought that, through questioning and discussion, truth could be found.

Socrates believed that students could contribute to the learning process, and that the process of learning knowledge was more important than knowledge itself. He believed that any uneducated person could discover the truth through language, under a mentor's

guidance (Taylor, 1908). One important message in this statement is that ability in critical thinking and rationality could contribute to the discovery of knowledges.

Lastly, in Socrates' philosophy, interactive learning is an effective way of studying. In optimal circumstances, a class is divided into small groups in which each student has a chance to express him or herself, so that trust may be built among students and between teachers and students.

Following the age of Socrates and the collapse of the Roman Empire, the Western world went through the long period of the Middle Ages, when the church was in charge of ideology, politics and education. During the Middle Ages, the theory of original sin was put forward by the Church; everyone is born with sin, so people come into this world to be punished. Based on that theory, teachers should exert firm control over students and, when necessary, corporal punishment is acceptable. Under such a system, teachers were given the dominant position, while students were in a subordinate position. In other words, Western education in the Middle Ages was teacher-oriented.

After the great geographical discoveries and the Renaissance movement in the fifteenth century, philosophers in the West created and emphasized human values and the concepts of autonomy, liberty, freedom and rationality. The ideology and the philosophy of establishing the modern educational system in the Western world have been deeply affected by the values emphasized in the Renaissance, for instance the student-oriented theory of education proposed in 1997 by Dewey, the educator in the United States of America. In Dewey's theory, students should be given as much autonomy and freedom as possible, and the teacher–student relationship should be liberal. Through the explorations of students, they can perform well in academic work; the role of teachers is to assist and guide students to think critically and independently. Similar values and cultures relevant to the teacher–student relationship are found across several European countries (Fryberg & Markus, 2007; Sahlberg, 2007).

In summary, current Western education emphasizes autonomy, critical thinking, students' right to question and sufficient group discussion. Although there was a long period of

teacher-centred education in Western history, the Western teacher–student relationship is nowadays student-oriented.

### **5.2.2 The present study under the framework of previous findings**

The present study examined cultural differences in the teacher–student relationship and the trust between teachers and students by conducting quantitative and qualitative research on teachers and students in Hong Kong, representing Eastern culture, and in United Kingdom, representing Western culture. To the knowledge of the author, this is the first study to collect data on teacher–student trust directly from regions in the Eastern and in the Western world. Therefore, the present study has important implications and additional findings that will enrich the literature regarding the trust between teachers and students.

In this section, the concepts involved in the present study will be linked to these concepts in the literature and will be discussed under the framework of Eastern and Western education value systems so that the implications of the major findings in the present study become clearer.

#### *5.2.2.1 The six dimensions identified in Part A of the student questionnaire*

Six dimensions were identified from the variance-covariance matrix of the 27 questions in Part A of the student questionnaire. Those dimensions have been shown to have good statistical validation and soundness. Those six dimensions are:

- 1) Importance, or students' attitude to the importance of teacher–student relationship;
- 2) Expertise, or students' attitude to the importance of teachers' expertise on academia/teaching;
- 3) Authority, or students' attitude to the authority of teachers;
- 4) Closeness, or students' expected closeness of their relationships with teachers;
- 5) Class atmosphere, or students' preference for class atmosphere;
- 6) Trust, or students' trust in teachers.

Those six dimensions have been previously identified in the literature. The importance of interpersonal trust, though not widely studied in the past, has always been an underlying character of all trust studies. Studies in the Western education settings showed that the importance of interpersonal relationship is a key indicator of work effectiveness (Webb et al., 2009).

Western society, especially countries with comprehensive state funding policies for education systems, evaluates teaching proficiency largely depending on teachers expertise (Jeong et al., 2010; Shin, 2010). Numerous accreditation process in higher education systems also takes into account teachers' expertise (DeBoyes, 2009).

Authority has been a main identifier of student and teacher relationships in Eastern settings. Confucius stressed absolute authority over his student at the beginning of Eastern schools of education (Confucius, 1979; Mencius, 2009; Xuncius, 2009). More recently, the confucian view of authoritativeness among the teachers is still present (Grenier, 2011; Titus & Ballou, 2014; Zamani & Erfanirad, 2011). In Western culture, equality among all parties are more valued by educators (Allport, 1950), which showed an interesting contrast opposed to the Eastern world.

Closeness usually plays out in the form of student's interpersonal relationships with teachers. Studies in Western samples has shown that the more close people are, the more willingness they take to show vulnerability (Rousseau et al., 1998). The better students built up interpersonal relationships with each other, the less likely they overlooked their own biases in discussions. (Brogan & Brogan, 1995). Studies with Eastern cultural backgrounds also looked into the interpersonal trust of college students and their teachers (Zhang & Wang, 2003).

A trusting atmosphere on an institutional level provides a good start point for teachers and students to work on individual trust. Studies of both Western and Eastern cultural backgrounds had tapped into the institutional levels of trust (Lee, Zhang & Yin, 2011; Van Maele & Van Houtte, 2012), showing it can be beneficial to both the teachers and the students. The teachers presented higher job satisfaction and commitment, and students, were more likely to trust their teachers on an individual basis.



Last but not least, the topic of trust, referring to individual trust, has been studied as a whole to assess teacher-student relationships all over the world in higher education.

Results of the current studies resonate with the previous findings, and can be explained by the past literature.

First, findings show that the more important the students think that the teacher–student relationship is, the more the students trust their teachers. The UK and HK students showed different patterns in their attitude to the importance of the teacher–student relationship: for the HK groups, the first-year students tended to give a higher level of importance to the teacher–student relationship; for the UK groups, it was the final-year students who were more likely to think the teacher–student relationship was important. However, the observation was not statistically significant. Although students’ attitude to the importance of the teacher–student relationship was not directly proposed by Confucian or Socratic culture, it was clearly discussed in Eastern and Western culture. In Eastern culture, teachers are supposed to play an important role by conveying knowledge to students and solving problems for them. In other words, teachers in Eastern culture are considered to carry out functional values, rather than interpersonal values, when interacting with students. Confucius emphasized the importance of close teacher–student interactions, and he proposed treating the teacher–student relationship as a father–son relationship. Without any doubt, in Eastern culture students are expected to regard it as important to maintain a good relationship with their teachers. However, under the philosophy of Socrates, self-generation of knowledge is emphasized, and students are encouraged to discover truth by logical reasoning and critical thinking. Therefore, in Western culture, teachers are viewed more as assistants in guiding students to think independently, and students expect to regard maintaining a good relationship with their teachers as less important.

Second, the findings show that the more that the students feel that their teachers are authoritative, the less likely it is that they will trust their teachers. HK students tended to show more respect for teachers’ authority. Furthermore, HK final-year students showed more respect for teachers’ authority, while the UK first-year students tended to show more respect for teachers’ authority. As mentioned, there is a huge difference in students’

attitudes towards teachers' authority in Eastern and Western cultures. Although Confucius himself proposed that teachers and students should have equal status, Chinese society after him established the value of total respect to teachers and teachers were viewed as the absolute authority in academic issues. Teachers set restrictive criteria on students and kept their authority by interpreting the Confucian classics. Therefore, in Chinese society, teachers think that they should have a certain authority in academic matters, and students have a greater degree of tolerance for teachers' authority as society expects them to be respectful to their teachers. Socrates' philosophy treats this matter completely differently. In Socrates' opinion, students should be aware of the power of questioning, and they are expected to raise questions and challenges for their teachers. Teachers are not the absolute authority and do not need to present themselves as a figure of authority over students. Therefore, students are expected to have low tolerance for teachers' authority and to think teachers' authority image is not necessary in Western culture.

Third, the findings show the more that the students expect a close relationship with their teacher or expect the teachers to be considerate of them, the more likely it is that they will trust their teachers. No statistically significant findings were concluded, though UK students show a trend to value more teacher-student interpersonal closeness. Cultural differences are also to be expected regarding students' closeness in their relationships with teachers. The students' expected closeness addressed in the present dissertation is linked to the element of caring for students, or the intimacy of the teacher-student relationship, according to Confucian ideology on education. Confucius advocated that teachers have an intimate relationship with their students and should care for aspects of their students' personal life. Confucius himself had many experiences of taking care of his students. Therefore, in the Eastern culture, students are expected to have a close relationship with their teachers and teachers are expected to take care of their students, even aspects of their personal lives. However, in Western culture, since the spread of the ideas of autonomy and freedom after the Renaissance, students are expected to have their own space in study and are given considerable freedom in academic work. Therefore, students in Western culture are expected to have a less close relationship with their teachers and to retain autonomy and privacy. This is the phenomenon of individualism and collectivism in those two cultures. Western cultures put considerable value on individualism, and students are

expected to be more individualistic and independent, thus expect a low degree of closeness with their teachers. Eastern cultures put considerable value on collective lives, so teachers are more involved in their students' academic and personal lives and students tend to think that maintaining a close relationship will help them to build trust with their teachers.

Fourth, the findings show that the more that students prefer an active and autonomous class atmosphere, the more likely it is that they will trust their teachers. The UK students preferred a freer classroom atmosphere than the HK students. The year of attendance did not show a statistically significant difference in students' preference for classroom atmosphere. Students' preference for an active and efficient class atmosphere may have different cultural expectations in the East and West. Western culture expects students to prefer an active class atmosphere and group discussion. This is because, in Socrates' philosophy, questioning teachers is an important approach to pursuing the truth, so the active interaction between teachers and students is important; moreover, splitting the class into smaller groups and encouraging group discussion are efficient ways to help students to build trust between each other and to help them to build trust in teachers. Therefore, active interaction between teachers and students and group discussion are important tools of instruction and factors in building trust between teachers and students. However, in Eastern culture, because the teacher is the authority in the classroom, students hesitate to have active interaction with teachers, since they may give the wrong answers in front of other students.

Lastly, the more important that the students think teachers' expertise in academics or teaching is, the more likely it is that the students will trust their teachers. There was no statistical significant findings between cultures, though UK students and final year students showed a trend to value teacher's expertise more. Both Confucius' and Socrates' philosophy expected students to think of teachers' expertise in academics and teaching as an important thing. In Confucian culture, the position of the teacher is most important. Although Confucius himself encouraged students to have their own opinions, his followers and the whole of Chinese society after the establishment of the examination system expected students to have total respect for their teachers, as teachers' instruction

and teaching were vital to students' success in examinations. In addition, a teacher's expertise is one of their major functional values. Therefore, from the perspective of the expectations of Eastern culture and society, students tend to think teachers' expertise in academic work and teaching is extremely important, because the practice of teaching is the key to their success. In Socratic philosophy and Western culture, teachers' expertise in academic work and teaching is also important. Although teachers are supposed to play the role of guide and assistant in the Western education system, the expertise of teachers will affect students' academic performance. In the language of Socrates' philosophy, teachers need to be professional in pursuing truth if they want to guide their students to pursue the truth.

The trust of students in their teachers, as manifested by the behaviours of those willing to have communication with, seek advice from and maintain good relationships with teachers, could be discussed under the theory of three-element trust. In this theory (Butler, 1991), trust is regarded as composed of three elements: integrity, competence and benevolence. Integrity is related to the notion of finding that a trustee can keep promises and principles; competence deals with the skills, abilities, capabilities and characteristics of teachers. The essence of benevolence is that one is willing to aid another. Students' trust in teachers, in the present study, is a good illustration of three-element theory: students are willing to communicate with and seek advice from teachers because they think their teachers can keep promises (integrity), are capable of helping them (competence) and are willing to aid students (benevolence).

#### *5.2.2.2 The seven qualities of good students in the eyes of teachers*

Besides the studies on students' trust in their teachers and the factors contributing to trust, the present research also studied how teachers view their relationship with students and their views on the factors contributing to trust with students. In the teacher questionnaire, teachers were asked to rate the importance of seven qualities as potential attributes of a good student. The seven qualities are:

- 1) Good attitude to academic field. Take notes and pay attention to lecture. (Attention to academic work)

- 2) Outgoingness. (Outgoingness)
- 3) Politeness. (Politeness)
- 4) Often seeking advice for academic purposes, inquisitive learner. (Advice-seeking)
- 5) Making confrontations with the teacher in class. (Confrontation of authority)
- 6) Willing to accept help from teachers. (Closeness)
- 7) Critical thinker. Not by-the-book type. (Critical thinking)

The seven candidate qualities stated above are linked to values in Confucian or Socratic philosophy and reflect the elements of trust in teacher–student relationships in both Eastern and Western culture.

First, the UK teachers tended to put more value on students’ confrontation of authority than the HK teachers, but no significant difference in teachers’ values on critical thinking was found. In the world of Socrates’ philosophy, confrontation of authority and critical thinking reflect the two important elements of a proper teacher–student relationship. Socrates emphasized the importance of questioning, and he believed that by questioning the reasoning of teachers students had the chance to take the path to the truth. Besides, Socrates did not hold any authority himself. He was aware of his own limitations and ignorance, and he thought that he did not know everything. Therefore, he insisted that teachers are not the authority or representative of knowledge, and teachers should discuss with students to pursue the truth. Nowadays, Socrates’ ideas still have a great influence on educational practices in the Western world. In the environment of education in the West, confrontation of authority and critical thinking are acknowledged and widely recognized as good qualities in students (Boghossian, 2003).

Secondly, findings reveal that HK teachers and UK teachers valued politeness to the same extent. HK teachers put more value on students’ attention to academic work as well as closeness than UK teachers did. Politeness, attention to academic matters and closeness are valuable qualities in the Chinese education tradition. Apart from the value of trust (*xin*,

信), Confucius (1997) emphasized the virtues of *ren* (仁), namely benevolence to others, and *yi* (義), namely the integrity of one's behaviour. Based on the ideas proposed by Confucius, China established a whole system of moral standards that Chinese people are supposed to follow. Even though modern China has experienced great influence from Western cultures, those traditional morals still have a great influence on society. Therefore, it is no wonder that Chinese teachers put more value on politeness when determining whether a student is a good student. Besides, China had a long period when the examination was the only path for ordinary people to enter the political arena successfully. Therefore, Chinese parents and society have a long tradition of viewing youths' academic performance as the standard of success. So Chinese teachers wish to put more effort into improving students' academic performance, and they tend to prefer students who pay plenty of attention to their academic work. Moreover, students' expected closeness and their willingness to receive help from teachers are also important elements in the Chinese educational environment. In Confucius's ideology, teachers are supposed to have a close relationship with their students, and they should be caring and considerate about both students' academic matters and their private lives. Therefore, in Chinese educational institutions, teachers are more willing to keep close to students and provide advice and assistance to guide their academic development and solve students' confusion in their lives. Therefore, Chinese teachers are more likely to think that students who are willing to accept help from them have the qualities of good students.

Lastly, HK teachers' rating of outgoingness was a little higher than the UK teachers' rating, and the UK teachers tended to value students' advice-seeking behaviour more, but the difference was not statistically significant. The qualities of outgoingness and advice-seeking are two qualities with no obvious obligation to either Western or Eastern values. The quality of outgoingness was not explicitly addressed in the value systems of Confucius or Socrates; therefore, no hypothesis of cultural difference was made. By contrast, the quality of advice-seeking is valued in both, and for different reasons. In Confucius' ideas, advice-seeking is a valuable quality because it facilitates and strengthens the bond between teachers and students and, through advice-seeking, teachers could provide better guidance in conveying knowledge to students and more instant

suggestions regarding students' confusions and difficulties in their lives. On the other hand, in Socrates' philosophy, advice-seeking is a quality to facilitate deep discussion between teachers and students. Discussion is an important approach to pursuing truth, in Socrates' philosophy, and students who often seek advice from teachers are more likely to be valued by teachers in Western culture.

## **6. Conclusion**

### **6.1 overview of contributions of the current study**

After putting the concepts involved in the present study in the context of the literature on understanding teacher–student trust in Eastern and Western cultural systems, the linkages between the current concepts and those in the literature were established. The next step is to discuss the implications of the findings in the present study in the context of earlier findings and theories about trust.

#### **6.1.1 How contributing factors affect trust**

The present study investigated the impact of five elements of students' trust in teachers. Those elements include students' attitude to the importance of the teacher–student relationship (importance), students' attitude to the authority of teachers (authority), students' expected closeness of their relationships with teachers (closeness), students' preference for an active and autonomous class atmosphere (class atmosphere) and students' attitude to the importance of teachers' expertise in academia/teaching (expertise).

The results of the present study are that it is students' attitude to the importance of teacher–student relationship (importance), their expected closeness of their relationships with teachers (closeness), their preference for an active and autonomous class atmosphere (class atmosphere) and their attitude to the importance of teachers' expertise in academia/teaching (expertise) that are positively related to the level of their trust in teachers. On the other hand, students' attitude to the authority of teachers (authority) was found to be negatively correlated to the level of students' trust in teachers.

The issues about the factors contributing to the level of students' trust in teachers and how those factors take place in the process of building teacher–student trust were mainly examined by Ghosh, Whipple and Bryan in 2001. They concluded that students' trust in teachers is likely to be affected by the following characteristics of a teacher: their expertise (technical competence in academic matters and teaching), cooperation (willingness to work together), timeliness, congeniality (friendliness, courtesy and goodwill in interactions with students), openness (willingness to share information), tactfulness,



sincerity (honesty and intention to fulfil promises) and integrity (unwillingness to sacrifice ethical standards to achieve organizational objectives). Among these values, sincerity, expertise and congeniality are the top three influential elements of student trust in teachers.

The present study tackled this issue with a different approach from Ghosh, Whipple and Bryan (2001). Ghosh and co-workers focused on the characteristics of teachers in influencing students' trust in them, while the present study investigated the factors contributing to students' trust in teachers not only from the perspective of teachers but also from the perspective of students. Moreover, the factors chosen by the present study are more likely to reflect cultural differences in teacher–student relationships, while cultural difference was not a concern in Ghosh, Whipple and Bryan's study.

Of the five factors included in the present study, authority, expertise and class atmosphere are the three that are from the perspective of teachers. Whether teachers present as a figure of authority in front of students, whether they are thought to be professional or competent in academic matters and teaching and whether they create an active and autonomous class atmosphere were found to affect whether students develop trust in and reliance on them. The factor of expertise in the present study is comparable to the factors of expertise (technical competence to academic matters and teaching) in Ghosh, Whipple and Bryan's study (2001). The conclusions from the two studies are consistent with each other: if students think that their teachers are professional in academic matters and teaching, they will trust them more. In addition, its findings about authority and class atmosphere are unique contributions by this study: a) teachers' authority is an obstacle to building teacher–student trust; if a teacher presents as an authority figure over his or her students, they are likely to think them less trustworthy; b) if a teacher can create a class atmosphere where students are asked to actively interact with teachers and with each other, and group discussions are encouraged, students would like to like this teacher and find him or her more trustworthy.

The remaining two factors are students' attitude to the importance of the teacher–student relationship (importance) and students' expected closeness of their relationship with

teachers (closeness). The factor of closeness can be linked to the concept of congeniality (friendliness, courtesy and goodwill in interactions with students) in Ghosh, Whipple and Bryan's study (2001), although in the present study closeness is from the perspective of students, while in the earlier study congeniality is from the perspective of teachers. The findings in the two studies about closeness echo each other: if students expect to have a close relationship with their teachers and the teachers show friendliness and goodwill in interacting with them, students are more likely to rely on and build trust with them. The finding about students' attitude to the importance of the teacher–student relationship is a further unique contribution by the present study: if students think that maintaining a good relationship with their teachers is important or even vital, they will be more willing to interact with them and accept their advice and help, could build a bond with them and would like to trust them further.

#### **6.1.2 Cultural differences in students' trust in teachers**

The present study investigated the cultural differences in students' trust in teachers via the questions included in both Parts A and B of the questionnaire for students. Some results in part confirmed the educational theories of Eastern and Western cultures. For example, the HK students valued authority more than the UK students, and the UK students preferred a more equal relationship with their teachers, while the other results remained statistically insignificant. Some results contradicted what was proposed above.

As we mentioned above, the HK students had almost the same level of value for teachers' expertise as the UK students did. No cultural difference in students' attitudes to the importance of teachers' expertise was found, and the students in both the Eastern and Western educational systems think that teachers' expertise is important. However, as we conjectured, although both cultures value teachers' expertise, there may be different explanations about these values in the East and the West. From the perspective of the expectations of Eastern cultures and societies, students tend to think teachers' expertise in academic matters and teaching is important since the practice of teaching is the key to their success, whereas in Socratic philosophy teachers need to be professional about pursuing truth if they want to guide their students, in turn, to pursue truth.

Secondly, the HK students put more value on teachers as a figure of authority than the UK students do. This finding is consistent with our hypothesis, based on the literature reviewed. After Confucius, Chinese society established the value of total respect to teachers, who are viewed as the absolute authority in academic matters. In the past, teachers set restrictive criteria on students and maintained their authority by interpreting the Confucian classics. Therefore, no doubt as they are from a region where many Chinese traditions are retained, the HK students valued teachers' authority more than the UK students. In contrast, in Socrates' philosophy students should be aware of the power of questioning and they are expected to raise more questions and challenge their teachers. Therefore, being from a country under the influence of Socrates' culture, the UK students tend to think teachers' authority less important.

Thirdly, the HK students put more value on teachers' moral standard than the UK students did. This finding is consistent with our hypothesis, based on the review of the essence of Eastern culture. Traditional China established a whole system of moral standards according to the ideas proposed by Confucius and which Chinese people are supposed to follow. Even if modern China has experienced great influence from Western culture, those traditional morals still have a strong influence on society. In the field of education, there is an expectation of teachers' moral standards, as in the idiom 'a teacher is model of virtue for others' (为人师表). Therefore, there is no doubt why the HK students put more value on teachers' moral standards when establishing their trust in teachers.

Fourthly, the HK students put more value on teachers imposing strict class discipline and a heavy workload in building trust in teachers than did the UK students. This finding is related to our conjecture of the impact of class atmosphere. Western culture expects students to prefer an active class atmosphere and to prefer group discussions, and the student-oriented teaching philosophy of the West proposes a liberal atmosphere and an autonomous status for students. However, in Eastern culture, because the teacher is the absolute authority and examinations are crucial for students' success, students are usually restrained by stricter class discipline and given a heavy workload. As a result, the HK students, as representatives of Eastern culture, put more value on these aspects. They tended to think that teachers who set strict class discipline and give heavy workloads will

make them succeed in their academic performance, and therefore are more likely to trust those teachers than the UK students do.

Lastly, the UK students valued their teachers' intelligence in establishing their trust more than the HK students. Teachers' intelligence was not explicitly mentioned in Confucius' ideology or in Socrates' philosophy, yet this finding is no surprise. This is because, in his discussions about education and truth, Socrates assumed the wisdom of teachers and students in pursuing truth. Moreover, intelligence is more likely to be attributed as the key to success in Western culture, while in Eastern culture it is more often held to be the virtue of hard work. Therefore, it is no surprise that the UK students valued teachers' intelligence more highly.

## **6.2 Implications of the values about teacher–student trust in practice**

The rich findings in the present study have given inspiration and raised several implications for our understanding of many values in the field of teacher–student trust. This section will discuss three aspects of those values: the contradiction between equality and authority; the proper degree of closeness in the teacher–student relationship (the contradiction between autonomy and caring); and the active versus a passive class atmosphere.

### **6.2.1 Equality versus authority**

Equality between teachers and students was emphasized by Confucius two thousand years ago. In his opinion, teachers might be more knowledgeable at present in some academic fields; however, their students could match or even exceed them in these fields after years of study. Moreover, they might have a better understanding of the knowledge or principles, from their own perspective. Therefore, teachers should communicate with their students from a position of equality when discussing academic problems. However, after hundreds of years of transition, the absolute authority of teachers was established in Chinese society. Teachers are expected to be an authority figure in front of their students to ensure that they are respected and can convey the knowledge more smoothly. The authority of teachers has been built into Chinese society due to both the influence of traditional values

and the reality of modern Chinese society, in which many still regard college entrance examinations as the only way for ordinary people to move up the social ladder.

Things are a little different in Western educational systems. In the age of Socrates, the power of questioning had been emphasized. By questioning teachers, students are expected to discover or generate knowledge on their own. In modern times, educators in Europe and America have promoted liberal and student-oriented education, where students are given sufficient authority and encouraged to think critically. Overall, Western culture allows students to be more critical and doubting. Therefore, students in the West usually are more likely to challenge teachers' authority, questioning either their logic or the knowledge that they convey.

In the present study, the HK students' preference has been confirmed for teachers to present a figure of authority if they are to trust teachers, in contrast to British students. That is, Hong Kong has retained a cultural tradition whereby teachers should be authoritative, to some extent. This finding was confirmed in the interviews with two HK teachers. Both think that they should be authoritative, in some sense, especially in academic matters. Through deep communications with those two teachers, the present author established that HK teachers tend to think that students will not trust their professionalism and will not finish their assignments on time if they do not maintain an authoritative presence in class.

On the other hand, the present study reveals that there is a negative correlation between students' attitude to teachers' authority and students' trust in their teachers. That is, if a student tends to think he or she should show respect to teachers and not question or confront their authority, that student is less likely to build trust in their teachers. The important implication from this finding is that, from the perspective of students, too much authority on the part of teachers may represent an obstacle to building a healthy teacher–student relationship and students' trust in teachers, which will affect students' final academic performance.

A discrepancy between the views of teachers and students has been observed in the results of the present study in the cognition of teachers and students, and it has important

implications for teaching practice and the interaction between students and teachers. Teachers think that they should maintain an authoritative presence in front of students, while students may not trust teachers who are too authoritative. Therefore, it is vital for teachers to control the degree of authority that they display in class, because too much will hinder trust-building in their students.

### **6.2.2 Autonomy versus caring**

In Eastern culture, caring for students was proposed during the age of Confucius. In his ideology, the teacher–student relationship resembled a father–son relationship, and students were indeed asked to treat their teachers as fathers. Confucius took care of his students, even over details of their personal lives. Those ideas proposed by Confucius still have great influence on modern Chinese society. Nowadays, many Chinese teachers still think that taking care of students is part of their obligations; and many Chinese students still expect to receive advice and help from teachers about their academic matters, whether in life or in their career.

By contrast, in Western culture, students’ freedom and personal space are supposed to be respected. In the modern philosophy of student-oriented education proposed by educators in Europe and United States, students should be given autonomy and freedom. Therefore, in the West, teachers are not expected to take part in students’ personal lives, and they are expected to give students guidance in academic matters with the prerequisite that they are also given sufficient autonomy.

The present study has confirmed that HK students are more likely to expect to receive advice and help from their teachers than UK students do. They expect to have a closer relationship with their teachers, and they do not mind sharing their personal experiences and feelings with their teachers, if they are willing to listen or to help. If a teacher shows a willingness to communicate with the students after class or give advice or help, he or she will be more likely to be marked as trustworthy by HK students.

From the perspective of teachers, HK teachers are encouraged to consider more of their students who are willing to accept help from them as good students than UK teachers do. If the students show that they prefer a closer relationship with their teachers, the teachers

will like them more, and the trust between teachers and students will be built more easily. The findings about caring or expected closeness from the perspective of both students and teachers echo each other, implying that in Hong Kong there are the same expectations regarding the closeness of the relationship between teachers and students. Therefore, teachers in Hong Kong can show their characteristic of caring and willingness to help in front of students to improve the level of students' trust in them.

### **6.2.3 Class atmosphere**

Class atmosphere is another important issue in the present study. Influenced by traditional values, the atmosphere could be implemented differently in the East and West.

Although equal discussion was encouraged by Confucius in his interactions with students, after Confucius classrooms in China became characterized by an atmosphere in which teachers conveyed knowledge and students played the role of receivers of knowledge. Since the teachers were the absolute authority in class, questioning and critical thinking is not encouraged. In modern Chinese society, some of these features of the traditional classroom have survived. Students are still regarded as the receivers of knowledge, and autonomous discussion and critical thinking are not encouraged.

The Western classroom has seen a totally different pattern of activities. In the age of Socrates, students discussed problems with their teachers at the same table. Moreover, questioning and critical thinking were encouraged, because they were thought to be the way to truth and to generate knowledge. Many of Socrates' ideas have been retained in modern Western classrooms. In a typical modern Western classroom, students are encouraged to answer teachers' questions, to raise their own ideas in class, to confront teachers if they think teachers are wrong and to participate in group discussion.

In the present study, the HK students have been shown to regard the strictness of class discipline and the heaviness of the workload that the teacher impose to be more important in judging if a teacher is trustworthy than UK students do. Further, the HK teachers tend to regard students' attention to academic matters as a quality of a good student; that is, if a student works hard on academic matters, he or she is more likely to be favoured by them. Besides, both the HK teachers interviewed think that certain rules should be set in the

classroom. Put simply, both students and teachers in Hong Kong think that a strict class atmosphere is necessary and acceptable.

Hong Kong is a place where East meets West. The system of higher education in Hong Kong has been deeply affected by Western culture. To be specific, the settings and regulations of universities in Hong Kong are currently similar to those in the higher education systems of the United States and the United Kingdom. The approaches to teaching in HK universities are close to those in the Western world. For instance, the curricula in universities include both lectures, where teachers impart knowledge, and tutorials, where group discussion takes place. Similar to Western universities, the teachings staff in Hong Kong like to raise questions in class, and they expect students to answer and discuss those questions. As seen in the interviews with the HK and UK students, HK students are not as active as UK students in answering teachers' questions. Aside from the risk of losing face, an important reason may be cultural values, in that HK students expect to be the receivers of knowledge and do not have the appropriate awareness to discover knowledge through discussion.

It is hard to say which style of class atmosphere is better, but clearly there is a gap between the cultural values and real practice of class organization in Hong Kong; that is, HK students are more used to the traditional restricted class atmosphere, yet they are put into a system of Western education. Further attempts should be made to align the traditional values with the real educational system.



## Appendix A

### Confucianism in Eastern Education Philosophy

Confucius, a thinker and educator who started the first private school in ancient China, believed that learning is a special lifelong experience: ‘Isn’t it a pleasure to learn and practice what you have learned?’ (*The Analects*, 1:1), said Confucius. Education is one of the focuses of Confucius’ *The Analects*, where he described the three most important tasks of his life: ‘The silent treasuring up of knowledge, learning without satiety, and instructing others without being wearied’ (*The Analects*, 7:2). Confucius valued the role of models, who are men of good virtue and can guide others to find their own good natures (Shim, 2008).

Confucius emphasized that students should show respect for teachers; on the other hand, teachers should also respect their students and learn from them. Confucius encouraged his disciples to learn from different sources, and sometimes admitted that he learned many good virtues from his students, especially from Yan Hui. Teachers can learn new things and be inspired during instruction or discussion with students, thus teaching is a process of self-cultivation (Shim, 2008). Confucius stated that ‘among any three people, there must be one who can be my teacher’ and ‘Never feel ashamed to ask and learn from one’s subordinates’.

## Appendix B

### Key Features of Confucian-Oriented Education in East Asia

One characteristic of the educational models in Confucian-oriented education is the parent–teacher partnership, and this emphasis on parental involvement is not difficult to apply, given the Confucian cultural tradition. According to the Chinese *Three Character Primer*, it is a fault for a father to raise a child without education. The connections between parents and teachers are stronger in East Asian countries than in the West. East Asian parents view parental involvement in children’s education as an indispensable part of their role, and teachers enjoy great trust and esteem in both traditional and contemporary East Asian society (Gopinathan, 1998). It has been revealed that there is less tension between parents and teachers in East Asian educational systems (Jeynes, 2005). Parents are invited to school fairs, and their interest in education is stimulated by the conversations with teachers. These interactive activities reinforce their positive impression that the education is of high quality and the teachers and staff are reliable (Hallinger & Kantamara, 2000).

The second feature of the systems in Confucian-oriented education is whole-class teaching, as opposed to dividing a class into small groups, which is the dominant practice in Western schools. The Confucian notion that collective welfare is more important than individual interest has been emphasized in Eastern culture, and the trust of individuals in the organizations that they belong to seems consistent with Confucian values. In collectivist cultures, the ties among people are tight, relationships are highly structured and the needs of the group are given the highest priority, while individual needs are subservient. Collectivist values include harmony, filial piety and equality of distribution (Walker, Bridge & Chan, 1996). Individuals are encouraged to adapt to group conventions, control their emotions, avoid conflict and maintain inner harmony (Kirkbride & Tang, 1992).

The third characteristic of Confucian-oriented education is that moral education, which emphasizes common virtues such as honesty, sincerity and responsibility, has been largely embedded in modern education, and Japan is a good example (Khan, 1997). Trust, as a positive value in interpersonal and inter-organizational relationships, can be nurtured by

an environment in which positive moral values are emphasized. Another remarkable difference between Western and East Asian education is that the former emphasizes intelligence and ability while the latter emphasizes effort; it is believed in East Asia that almost anyone can succeed, if they work hard enough.

The fourth characteristic of the Confucian-oriented education model is its focus on the acquisition of essential knowledge rather than the generation of new ideas. Confucius said: 'I transmit, but I do not innovate; I am truthful in what I say and devoted to antiquity' (*The Analects*, 7:1). Confucius' role as the master or teacher of his disciples was defined by himself as the deliverer of knowledge, rather than of innovation. His words were to explain his objection to the surplus of generating new ideas. Besides, there are several instances of evidence suggesting that Confucius admired a learning style that focuses more on acquisition than questioning and critique:

I once spent all day thinking without taking food and all night thinking without going to bed, but I found that I gained nothing from it. It would have been better for me to have spent the time in learning.  
(*The Analects*, 15:31)

Even though Confucius expressed admiration of his disciples in questioning his ideas, the acquisition-focus style of learning remains a central point in Confucianism.

## Appendix C

### List of 27 Questions

Q1. I care very much about the interpersonal relationship between me and my teachers.

我很在意我和老師們的關係。

Q2. A good student will often ask teacher questions.

好學生會常常問老師問題。

Q3. The expertise of a teacher is very important.

老師的學術專業程度非常重要。

Q4. The intelligence of a teacher is very important.

老師的智力非常重要。

Q5. My teacher should always manifest a high moral standard.

我的老師應該是道德的楷模。

Q6. I am inclined to teachers with parental characteristics.

我會更喜歡像父母親一樣的老師。

Q7. Teachers should not interfere in students' private life.

老師不應該干涉學生的個人生活。

Q8. Teachers' primary role is to convey knowledge to students.

老師的首要任務是教與學生知識。

Q9. I enjoy a relaxed and free atmosphere in class.

我喜歡自由散漫的課堂。

Q10. It is not necessary to build trust between me and my teachers.

建立和老師們的信任不是特別需要。

Q11. I often raise my concern and questions to my teacher in class.

我常常在課堂上向老師提出疑問。

Q12. I would confront my teacher in class if I think his/her explanation of a certain point is wrong.

當我認為老師錯了，我會直接指出他/她的錯誤。

Q13. I don't think confronting my teacher directly with regard to the teaching content in class will humiliate him/her.

我不認為指出老師的錯誤會讓老師難堪。

Q14. My teacher would hate me if I made him/her realize his/her mistakes in class in front of other classmates.

老師會因為我指出錯誤而討厭我。

Q15. I enjoy group/whole-class discussion in class.

我喜歡課堂的團隊討論。

Q16. I think group discussion is effective.

我認為團隊學習很有效率。

Q17. Versatile teachers deserve more respect and trust.

多才多藝的老師應該受到更多的尊重。

Q18. Teachers are authoritative; I have to be humble in front of them to show my respect for them.

老師有師嚴，我應該在老師面前表達尊卑。

Q19. Being considerate is important for teachers.

細心體貼對於老師來說很重要。

Q20. I would rather consider my relationship with my teachers as equal.

我認為我和老師的地位是平等的。

Q21. Racial discrimination and other scandals of the university will reduce my trust in the faculty.

種族歧視的老師會影響我對其所在教育機構的信任度。

Q22. I will initiate communication with teachers.

你會主動與老師交流。

Q23. Teacher–student relationship has an influence on my academic result.

師生關係的好壞對我的學習成績有影響。

Q24. Teacher–student relationship has an influence on my mood.

師生關係的好壞對我的心情有影響。

Q25. The relationship between me and my teachers is great.

我與老師的關係非常好。

Q26. I often seek advice from my teachers.

我會常常向老師尋求建議。

Q27. I am willing to communicate more with my teachers in my leisure time.

我願意在課餘時間和老師交流。

## References

- Algan, Y., & Cahuc, P. (2010). Inherited trust and growth. *The American Economic Review*, 100(5), 2060-2092.
- Alfonsi, C. (2008). Hey, teacher! Get off that stage: Assessing student thinking with Socratic seminars. *Ohio Journal of English Language Arts*, 48(1), 65–71.
- Antonio, A., Astin, H. & Cress, C. (2000). Community service in higher education: A look at the nation's faculty. *Review of Higher Education*, 23(4), 373–397.
- Allport, G. (1950). *The Individual and his Religion* (p. 21). New York: Macmillan.
- ‘Back to School. (2006). ‘Back to school’, in *The Economist*, 23 March. Available from <https://www.economist.com/europe/2006/03/23/back-to-school>
- Baier, Annette (1986). Trust and antitrust. *Ethics*, 96(2), 231–260.
- Barton, J.L., Trupin, L., Tonner, C., Imboden, J., Katz, P., Schillinger, D., & Yelin, E. (2014). English language proficiency, health literacy, and trust in physician are associated with shared decision making in rheumatoid arthritis. *Journal of Rheumatology*, 41(7), 1290–1297. doi: 10.3899/jrheum.131350
- Billett, S. & Seddon, T. (2004). Building community through social partnerships around vocational education and training. *Journal of Vocational Education and Training*, 56(1), 51–68.
- Blonder, R., Jonatan, M., Bar-Dov, Z., Benny, N., Rap, S., & Sakhnini, S. (2013). Can You Tube it? Providing chemistry teachers with technological tools and enhancing their self-efficacy beliefs. *Chemistry Education Research and Practice*, 14(3), 269–285. doi: 10.1039/c3rp00001j
- Bluhm, L.H. (1987). Trust, terrorism, and technology. *Journal of Business Ethics*, 6(5), 333–341.
- Boghossian, P. (2003). I – Paul Boghossian. *Aristotelian Society*, suppl. vol. 77(1), 225–248. doi: 10.1111/1467-8349.00110



- Boghossian, P. (2012). Socratic pedagogy: Perplexity, humiliation, shame and a broken egg. *Educational Philosophy and Theory*, 44(7), 710–720.
- Bos, N., Olson, J., Gergle, D., & Olson, G. (2002). Effects of four computer-mediated communications channels on trust development. IN: D. Wixon (ed.), *Proceedings of the SIGCHI*, pp. 135–140. New York: ACM.
- Brogan, B.R. & Brogan, W.A. (1995, September). The Socratic questioner: Teaching and learning in the dialogical classroom. *Educational Forum*, 59(3), 288–296.
- Browne, M. & Cook, P. (2011). Inappropriate trust in technology: Implications for critical care nurses. *Nursing in Critical Care*, 16(2), 92–98. doi: 10.1111/j.1478-5153.2010.00407.x
- Bryk, A. & Schneider, B. (2002). *Trust in Schools: A core resource for improvement*. Russell Sage Foundation.
- Butler, J. (1991). Toward understanding and measuring conditions of trust: Evolution of a conditions of trust inventory. *Journal of Management*, 17(3), 643–663. doi: 10.1177/014920639101700307
- Chan, S. (1999). The Chinese learner – A question of style. *Education & Training*, 41, (6/7), 204–304.
- Chavous, T.M. (2002). African–American college students in predominantly White institutions of higher education: Considerations of race and gender. *African American Research Perspectives*, 8(1), 142–150.
- Cheng, K.-M. & Wong, K.C. (1996). School effectiveness in East Asia: Concepts, origins and implications. *Journal of Educational Administration*, 34(5), 32–49, Retrieved from <https://doi.org/10.1108/09578239610148269>
- Chen, M.-F. (2012). Segmentation of Taiwanese consumers based on trust in the food supply system. *British Food Journal*, 114(1), 70–84. doi: 10.1108/00070701211197374

Chen, R.S., & Liu, I.F. (2013). Research on the effectiveness of information technology in reducing the rural–urban knowledge divide. *Computers & Education*, 63, 437–445. doi: 10.1016/j.compedu.2013.01.002

Cohen, J., McCabe, E., Michelli, N. & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record*, [online] 111, 180–213. Available at: [https://www.researchgate.net/profile/Jonathan\\_Cohen4/publication/235420504\\_School\\_Climate\\_Research\\_Policy\\_Teacher\\_Education\\_and\\_Practice/links/59d67f050f7e9b42a6aa0145/School-Climate-Research-Policy-Teacher-Education-and-Practice.pdf](https://www.researchgate.net/profile/Jonathan_Cohen4/publication/235420504_School_Climate_Research_Policy_Teacher_Education_and_Practice/links/59d67f050f7e9b42a6aa0145/School-Climate-Research-Policy-Teacher-Education-and-Practice.pdf) (accessed 1 July 2019).

Confucius. (1979). *Confucius: The Analects*, trans. D.C. Lau. London: Penguin Books.

Constantinides, E. (2004). Influencing the online consumer's behavior: The web experience. *Internet Research*, 14, 111–126.

Cook-Sather, A. (2002). Authorizing students' perspectives: Toward trust, dialogue, and change in education. *Educational Researcher*, 31(4), 3–14.

Cortese, A.D. (2003). The critical role of higher education in creating a sustainable future. *Planning for Higher Education*, 31(3), 15–22.

Corrieri, S., Conrad, I., & Riedel-Heller, S.G. (2014). Do 'school coaches' make a difference in school-based mental health promotion? Results from a large focus group study. *Psychiatria Danubina*, 26(4), 319–329.

Crosby, A. (1981). A critical look: The philosophical foundations of experiential education. *Journal of Experiential Education*, 4(1), 9–15. doi: 10.1177/105382598100400103

DeBoyes, Z. (2009). A sense of trust through the eyes of African–American doctoral students: An examination of how a predominantly White institution of higher education can create an environment of inclusiveness. Dissertation, University of Denver.

- Delhey, J. & Newton, K. (2005). Predicting cross-national levels of social trust: global pattern or Nordic exceptionalism? *European Sociological Review*, 21(4), 311–327.
- Deutsch, M. (1958). Trust and suspicion. *Journal of Conflict Resolution*, 2, 265–279.
- Dewey, J. (1997). *How We Think*. New York: Dover.
- Dhillon, J.K. (2007). Trust, shared goals and participation in partnerships: reflections of post-16 education and training providers in England. *Journal of Vocational Education and Training*, 59(4), 503–515.
- Eifler, K.E. & Veltri, L.M. (2010). Drawing from the outside for support in teaching. *Journal of Nursing Education*, 49(11), 623–627. doi: 10.3928/01484834-20100630-02
- Erdem, F. & Aytemur, J.Ö. (2008). Mentoring – A relationship based on trust: Qualitative research. *Public Personnel Management*, 37(1), 55–65.
- Foddy, W. (1994). *Constructing Questions for Interviews and Questionnaires*. Cambridge University Press.
- Fries-Britt, S., & Turner, K. (2001). Facing stereotypes: A case study of Black students on a White campus. *Journal of College Student Development*, 42(5), 420–429.
- Fryberg, S. & Markus, H. (2007). Cultural models of education in American Indian, Asian American and European American contexts. *Social Psychology of Education*, 10(2), 213–246. doi: 10.1007/s11218-007-9017-z
- Gabarro, J.J. (1978). The development of trust, influence, and expectations. IN: *Interpersonal behavior: Communication and understanding in relationships*, pp. 290–303. Englewood Cliffs, NJ: Prentice Hall.
- Galston, W. (1977). A liberal defense of equality of opportunity. IN: L.P. Pojman & R. Westmoreland (eds), *Equality: Selected Readings*. Oxford: Oxford University Press.
- Gambetta, D. (2000). Can we trust trust. *Trust: Making and breaking cooperative relations*, pp. 213–237. Blackwell.

Gao, Z. (1992). *Confucius and the Chinese Way*. Shanxi People's Publishing House.

Ghosh, A., Whipple, T., & Bryan, G. (2001). Student trust and its antecedents in higher education. *Journal of Higher Education*, 72(3), 322. doi: 10.2307/2649334

Gibbs, P.T. (2004). *Trusting in the University: The contribution of temporality and trust to a praxis of higher learning*. Springer Science & Business Media.

Goddard, R., Tschannen-Moran, M. & Hoy, W. (2001). Teacher trust in students and parents: A multilevel examination of the distribution and effects of teacher trust in urban elementary schools. *Elementary School Journal*, 102(1), 3–18.

Golembiewski, R.T. & McConkie, M. (1975). The centrality of interpersonal trust in group processes. IN: L. Cooper (ed.), *Theories of Group Processes* pp. 131–185. London: John Wiley & Sons.

Gopinathan, S. (1998). *Language, Society, and Education in Singapore: Issues and trends*. Marshall Cavendish International.

Green, A. (1999). Education and globalization in Europe and East Asia: Convergent and divergent trends. *Journal of Education Policy*, 14(1), 55–71.

Greenholtz, J. (2003). Socratic teachers and Confucian learners: Examining the benefits and pitfalls of a year abroad. *Language and Intercultural Communication*, 3(2), 122–130.

Grenier, M.A. (2011). Coteaching in physical education: A strategy for inclusive practice. *Adapted Physical Activity Quarterly*, 28(2), 95–112.

Haines, S., McGown, R., Conway, H., Fisher, N., McVey, N., Gartshore, E., . . . Worricker, V. (2014). Increasing student involvement in a trust. *Nursing Times*, 110(5), 16–18.

Hallinger, P. & Kantamara, P. (2000). Educational change in Thailand: Opening a window onto leadership as a cultural process. *School Leadership & Management*, 20(2), 189–205.

- Hallinger, P. & Kantamara, P. (2002). Educational change in Thailand. IN: A. Walker & C. Dimmock (eds), *School Leadership and Administration: Adopting a cultural perspective*, pp. 123–140. London: RoutledgeFalmer.
- Hansen, J., Fung, I., Lacis, A., Rind, D., Lebedeff, S., Ruedy, R., Russell, G., & Stone, P. (1988). Global climate changes as forecast by Goddard Institute for Space Studies three-dimensional model. *Journal of Geophysics Research*, 93, 9341–9364, doi:10.1029/JD093iD08p09341.
- Haque, F., Kundu, S. K., Islam, M.S., Hasan, S.M. M., Khatun, A., Gope, P.S., . . . Luby, S.P. (2013). Outbreak of mass sociogenic illness in a school feeding program in Northwest Bangladesh, 2010. *Plos One*, 8(11), 8. doi: 10.1371/journal.pone.0080420
- Hardin, B., McCool, D., & Baumhackl, F. (2009). *BIM and Construction Management* (2nd edn). Hoboken, NJ: John Wiley & Sons.
- Harkness, K., Washburn, D., Theriault, J., Lee, L., & Sabbagh, M. (2011). Maternal history of depression is associated with enhanced theory of mind in depressed and nondepressed adult women. *Psychiatry Research*, 189(1), 91–96. doi: 10.1016/j.psychres.2011.06.007
- Hoecht, A. (2006). Quality assurance in UK higher education: Issues of trust, control, professional autonomy and accountability. *Higher Education*, 51(4), 541-563. doi: 10.1007/s10734-004-2533-2
- Horie, M. (2002). The internationalization of higher education in Japan in the 1990s: A reconsideration. *Higher Education*, 43(1). Retrieved from <https://link.springer.com/article/10.1023/A:1012920215615>
- Hosmer, L.T. (1995). Trust: The connecting link between organizational theory and philosophical ethics. *Academy of Management Review*, 20(2), 379–403.
- Hoy, W.K. (2002). Faculty trust: A key to student achievement. *Journal of School Public Relations*, 23(2), 88–103.

- Hoy, W.K. & Tschannen-Moran, M. (2007). The conceptualization and measurement of faculty trust in schools, pp. 87–114. IN: W.K. Hoy & M. DiPaula (eds), *Essential Ideas for the Reform of American Schools*. Charlotte, NC: Information Age.
- Hutton, E.L. (ed.). (2016). *Dao Companion to the Philosophy of Xunzi* (vol. 7). Springer.
- Jaasma, M.A. & Koper, R.J. (1999). The relationship of student-faculty out-of-class communication to instructor immediacy and trust and to student motivation. *Communication Education*, 48(1), 41–47.
- Jennings, E.E. (1971). *Routes to the Executive Suite*. New York: McGraw Hill.
- Jeong, B.G., Kyung-Hwang, I., Sohn, H.-S., Koh, K., et al. (2010). The Relationship between Trust in Healthcare System and Health Examination Participation. *Journal of Agricultural Medicine & Community Health*, 35(4), 395–404.
- Jeong, B.G., Kyung-Hwang, I., Sohn, H.-S., Koh, K., et al. (2011). The relationship between trust as social capital and participation in cancer screening. *Korean Journal of Health Education and Promotion*, 28(2), 63–73.
- Jeynes, W. (2005). Parental involvement in East Asian schools. IN: D. Hiatt-Michael (ed.), *International Perspectives on Parental Involvement*, pp. 153–179. Greenwich, CT: Information Age.
- Jones, K. & Bird, K. (2000). ‘Partnership’ as strategy: Public–private relations in education action zones. *British Educational Research Journal*, 26(4), 491–506.
- Jung, P.B. & Stephens, D.W. (eds). (2013). *Professional Sexual Ethics: A holistic ministry approach*. Fortress Press.
- Khan, Y. (1997). *Japanese Moral Education, Past and Present*. Fairleigh Dickinson University Press.
- Kilinc, A.C. (2014). School teachers' pupil control ideologies as a predictor of teacher professionalism. *Anthropologist*, 18(2), 565–574.

- Kirkbride, P.S. & Tang, S. F. (1992). Management development in the Nanyang Chinese societies of South-east Asia. *Journal of Management Development*, 11(2), 54–66.
- Kraimer, M., Wayne, S., Liden, R., & Sparrowe, R. (2005). The role of job security in understanding the relationship between employees' perceptions of temporary workers and employees' performance. *Journal of Applied Psychology*, 90(2), 389–398. doi: 10.1037/0021-9010.90.2.389
- Lagerspetz, O. (1998). *Trust and the Tacit Demand*, pp. 14–26. Netherlands: Springer.
- Lee, J., Zhang, Z. & Yin, H. (2011). A multilevel analysis of the impact of a professional learning community, faculty trust in colleagues and collective efficacy on teacher commitment to students. *Teaching and Teacher Education*, 27(5), 820–830.
- Lewis, J.D. & Weigert, A. (1985). Trust as a social reality. *Social Forces*, 63(4), 967–985.
- Lin, D., Zhang, S., Block, E., & Katz, L. (2005). Encoding social signals in the mouse main olfactory bulb. *Nature*, 434(7032), 470–477. doi: 10.1038/nature03414
- Lindstrom, M. (2011). Social capital, political trust, and health locus of control: A population-based study. *Scandinavian Journal of Public Health*, 39(1), 3–9. doi: 10.1177/1403494810382811
- Lindstrom, M., & Mohseni, M. (2009). Social capital, political trust and self-reported psychological health: a population-based study. *Social Science & Medicine* (1982), 68(3), 436–443. doi: 10.1016/j.socscimed.2008.11.004
- Marginson, S. (2011). Higher education and public good. *Higher Education Quarterly*, 65(4), 411–433. doi: 10.1111/j.1468-2273.2011.00496.x
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224–253.  
<http://dx.doi.org/10.1037/0033-295X.98.2.224>

- Mayer, R., Davis, J., & Schoorman, F. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709. doi: 10.2307/258792
- McCaffery, P. (2010). *The Higher Education Manager's Handbook* (2nd edn). London and New York: Routledge.
- McVeigh, C., Baafi, M., & Williamson, M. (2002). Functional status after fatherhood: An Australian study. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 31(2), 165–171. doi: 10.1177/088421702129004787
- Mencius. (2009). *Mencius*, trans. I. Bloom. New York: Columbia University Press.
- Michalos, A.C. (1990). The impact of trust on business, international security and the quality of life. *Journal of Business Ethics*, 9(8), 619–638.
- Mirza, M., & Redzuan, M.R. (2012). The relationship between teachers' organizational trust and organizational commitment in primary schools. *Life Science Journal – Acta Zhengzhou University*, overseas edn, 9(3), 1372–1376.
- Morrison, R., Cegielski, C. G., & Rainer, R.K. (2012). Trust, avatars, and electronic communications: implications for e-learning. *Journal of Computer Information Systems*, 53(1), 80–89.
- Mott, J., Shellhaas, R.A., & Joshi, S.M. (2013). Knowledge of epilepsy and preferred sources of information among elementary school teachers. *Journal of Child Neurology*, 28(6), 737–741. doi: 10.1177/0883073812451775
- Mukhopadhyay, S., & Smith, S. (2010). Ward-based clinical teaching in gynaecology: Principles and practice. *Journal of Obstetrics and Gynaecology*, 30(6), 541–544. doi: 10.3109/01443615.2010.484109
- Muller, C., Katz, S.R., & Dance, L.J. (1999). Investing in teaching and learning dynamics of the teacher–student relationship from each actor's perspective. *Urban Education*, 34, 3, 292–337.



Ortiz-Ospina, E., & Roser, M. (2016, July 22). Trust. Retrieved June 23, 2020, from <https://ourworldindata.org/trust>

Oppenheim, A.N. (1968) *Questionnaire Design and Attitude Measurement*. Heinemann.

Pan Li-Yong. (2012). Aesthetic education replacing religion: Dual aims of aesthetic faith value constructed by Cai Yuanpei. *Journal*6, 33(1), 56–60.

Park, J.S. (2012). The analysis of political attitudes among Korean youths – Focused on political efficacy and political trust. *Korean Journal of Youth Studies*, 19(5), 189–216.

Pearce, J.L. (1993). Toward an organizational behavior of contract laborers: Their psychological involvement and effects on employee co-workers. *Academy of Management Journal*, 36, 1082–1096.

Pekarsky, D. (1994). Socratic teaching: A critical assessment. *Journal of Moral Education*, 23(2), 119–134.

Peng, S.Q. (2000). *Guanxi and Trust – A local study on interpersonal trust in China*. Social Sciences Academic Press.

Perry, W.G. (1999). *Forms of Intellectual and Ethical Development in the College Years: A scheme*. Jossey-Bass Higher and Adult Education Series. ERIC.

Petersen, Z., Nilsson, M., Everett, K., & Emmelin, M. (2009). Possibilities for transparency and trust in the communication between midwives and pregnant women: The case of smoking. *Midwifery*, 25(4), 382–391. doi: 10.1016/j.midw.2007.07.012

Pope, M.L. (2004). A conceptual framework of faculty trust and participation in governance. *New Directions for Higher Education*, 127, 75–84.

Rafique, R. & Anjum, A. (2012). Trust in opposite gender friendship: A comparative analysis of male and female university students. Asian Conference on Psychology and the Behavioral Sciences 2012. *Conference Proceedings*.

- Reale, E. (2014). Challenges in higher education research: the use of quantitative tools in comparative analyses. *Higher Education*, 67(4), 409–422.
- Revilla, M.A., Saris, W.E., & Krosnick, J.A. (2013). Acquiescence and problems with forced-choice scales. *Journal of Social Psychology*, 130(3), 397–399.
- Richardson, A., Allen, J.A., Xiao, H., & Vallone, D. (2012). Effects of race/ethnicity and socioeconomic status on health information-seeking, confidence, and trust. *Journal of Health Care for the Poor and Underserved*, 23(4), 1477–1493. doi: 10.1353/hpu.2012.0181
- Riva, S., Monti, M., Iannello, P., Pravettoni, G., Schulz, P.J., & Antonietti, A. (2014). A preliminary mixed-method investigation of trust and hidden signals in medical consultations. *Plos One*, 9(3). doi: 10.1371/journal.pone.0090941
- Rousseau, D.M. (1985). Issues of level in organizational research: Multi-level and cross-level perspectives. *Research in Organizational Behavior*, 7, 1–37.
- Rousseau, D., Sitkin, S., Burt, R. and Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23(3), 393–404.
- Runciman, W.G. (1959). Plato's *Parmenides*. *Harvard Studies in Classical Philology*, 64, 89–120.
- Ryan, J., & Louie, K. (2007). False dichotomy? ‘Western’ and ‘Confucian’ concepts of scholarship and learning. *Educational Philosophy and Theory*, 39(4), 404–417. doi: 10.1111/j.1469-5812.2007.00347.x
- Sahlberg, P. (2007). Education policies for raising student learning: The Finnish approach. *Journal of Education Policy*, 22(2), 147–171. doi: 10.1080/02680930601158919
- Sako, M. (1992). *Price, Quality and Trust: Inter-firm relations in Britain and Japan*. Cambridge University Press.

- Saylor, C.D., Keselyak, N.T., Simmer-Beck, M., & Tira, D. (2011). Evaluation of social interaction, task management, and trust among dental hygiene students in a collaborative learning environment. *Journal of Dental Education*, 75(2), 180–189.
- Searle, J.R. (1995). *The Construction of Social Reality*. Simon & Schuster.
- Se-Hun, L. S. (2010). The role of trust in adoption of e-learning in South Korea: Comparison of high and low trust levels. *Information Systems Review*, 12(2), 25–45.
- Serrano-Guerrero, J., Romero, F. P., & Olivas, J.A. (2013). Hiperion: A fuzzy approach for recommending educational activities based on the acquisition of competences. *Information Sciences*, 248, 114–129. doi: 10.1016/j.ins.2013.06.009
- Sharp, J.A. & Howard, K. (1998) *The Management of a Student Research Project*. Gower.
- Shin, B.-S. (2010). Effect of brand personality congruity between student and college on trust, satisfaction, and loyalty. *Journal of the Korea Contents Association*, 10(5), 360–369.
- Shim, S.H. (2008). A philosophical investigation of the role of teachers: A synthesis of Plato, Confucius, Buber, and Freire. *Teaching and Teacher Education*, 24(3), 515–535.
- Shore, C. & Wright, S. (1999). Audit culture and anthropology: Neo-liberalism in British higher education. *Journal of the Royal Anthropological Institute*, 5(4), 557. doi: 10.2307/2661148
- Simola, H. (2005). The Finnish miracle of PISA: Historical and sociological remarks on teaching and teacher education. *Comparative Education*, 41(4), 455–470. doi: 10.1080/03050060500317810
- Small, M. (2005). *Being Trustworthy: A book about trustworthiness*. Picture Window Books.
- Smart, K.A., Parker, R.S., Lampert, J., & Sulo, S. (2012). Speaking up: Teens' voice their health information needs. *Journal of School Nursing*, 28(5), 379–388. doi: 10.1177/1059840512450916

- Smith, P.A., & Shoho, A.R. (2007). Higher education trust, rank and race: A conceptual and empirical analysis. *Innovative Higher Education*, 32(3), 125–138.
- Spring, J.H. (1976). *The Sorting Machine: National educational policy since 1945*. New York: McKay.
- Stuber, J.M. (2011). *Inside the College Gates: How class and culture matter in higher education*. Lexington Books.
- Sztompka, P. (1999). *Trust: A sociological theory*. Cambridge University Press.
- Taylor, A.E. (1908). *Plato*. London: Archibald Constable.
- Teichler, U. (1996). Comparative higher education: Potential and limits. *Higher Education*, 32, 431–465.
- Tierney, W.G. (2008). Trust and organizational culture in higher education. IN: *Cultural perspectives on Higher Education*, pp. 27–41. Springer.
- Tillmar, M. (2009). No longer so strange? (Dis)trust in municipality-small business relationships. *Economic and Industrial Democracy*, 30, 401–428.
- Titus, S.L., & Ballou, J.M. (2014). Ensuring PhD development of responsible conduct of research behaviors: Who's responsible? *Science and Engineering Ethics*, 20(1), 221–235. doi: 10.1007/s11948-013-9437-4
- Tschannen-Moran, M. & Hoy, W. (1998). Trust in schools: A conceptual and empirical analysis. *Journal of Educational Administration*, 36(4), 334–352.
- Tweed, R.G. & Lehman, D.R. (2002). Learning considered within a cultural context: Confucian and Socratic approaches. *American Psychologist*, 57(2), 89–99.
- Umbach, P. (2007). How effective are they? Exploring the impact of contingent faculty on undergraduate education. *Review of Higher Education*, 30(2), 91–123. doi: 10.1353/rhe.2006.0080

Van Houtte, M. (2006). Tracking and teacher satisfaction: Role of study culture and trust. *Journal of Educational Research*, 99(4), 247–256.

Van Maele, D. & Van Houtte, M. (2009). Faculty trust and organizational school characteristics: An exploration across secondary schools in Flanders. *Educational Administration Quarterly*. <https://doi.org/10.1177/0013161X09335141>

Van Maele, D. & Van Houtte, M. (2011). The quality of school life: Teacher-student trust relationships and the organizational school context. *Social Indicators Research*, 100(1), 85–100.

Van Maele, D. & Van Houtte, M. (2012). The role of teacher and faculty trust in forming teachers' job satisfaction: Do years of experience make a difference? *Teaching and Teacher Education*, 28(6), 879–889.

Vignoles, V. L., Owe, E., Becker, M., Smith, P. B., Easterbrook, M. J., Brown, R., ... & Lay, S. (2016). Beyond the 'east–west' dichotomy: Global variation in cultural models of selfhood. *Journal of Experimental Psychology: General*, 145(8), 966.

Walker, A., Bridges, E., & Chan, B. (1996). Wisdom gained, wisdom given: Instituting PBL in a Chinese culture. *Journal of Educational Administration*, 34(5), 12–31.

Warris, A. & Rafique, R. (2009). Trust in friendship: A comparative analysis of male and female university students. *Bulletin of Education and Research*, 31(2), 75–84.

Watling, C., Driessen, E., van der Vleuten, C. P. M., & Lingard, L. (2014). Learning culture and feedback: An international study of medical athletes and musicians. *Medical Education*, 48(7), 713–723. doi: 10.1111/medu.12407

Webb, R.L., Zhou, M.N., & McCartney, B.M. (2009). A novel role for an APC2-Diaphanous complex in regulating actin organization in *Drosophila*. *Development*, 136(8), 1283–1293.

Williamson, O.E. (1993). Calculativeness, trust, and economic organization. *Journal of Law and Economics*, 36, 453–486.

- Wiltshire, J.C., Person, S.D., & Allison, J. (2011). Exploring differences in trust in doctors among African–American men and women. *Journal of the National Medical Association*, 103(9–10), 845–851.
- Wittgenstein, L., Anscombe, G.E.M., & Rhees, R. (1953). *Philosophische Untersuchungen (Philosophical Investigations)*. Blackwell.
- Xing, F. (1995). The Chinese cultural system: Implications for cross-cultural management. *SAM Advanced Management Journal*, 60(1), 14.
- Xu, H-H. (2013). Research on the problems of the teacher–student relationship in universities [D]. North University of China.
- 王慕东 & 宋承志. (2007). 荀子‘乐教’思想简论. *US-China Education Review*, 4(8), 53–55.
- Yan, Yuanzhang (1993). *The Origin of Chinese Education Philosophy*. Joint Publishing Co.
- Yonezawa, A. (2003). Making world-class universities: Japan’s experiment. *Higher Education Management and Policy*, 15(2), 9-24, Paris: OECD.
- Yoo, T. (2010). Theories and realities of political efficacy, political trust and political participation. *Korean Journal of Local Government Studies*, 14(2), 243–267.
- Yoon, J. (2010). The effects of relationship with loyalty and trust on salesperson and travel company. *Journal of Tourism and Leisure Research*, 22(3), 233–250.
- Zamani, A., & Erfanirad, N. (2011). Assessing principles of adult learning in agricultural education. *Life Science Journal – Acta Zhengzhou University*, overseas edn, 8(2), 433–439.
- Zand, D.E. (1972). Trust and managerial problem solving. *Administrative Science Quarterly*, 17, 229–239.

Zhang, J.X. & Bond, H. (1993). Interpersonal trust for specific characters: Intercultural comparison and cognition model [J]. *Acta Psychological Sinica*, 25(2), 164–72.

Zhang, X. & Wang, X. (Jul. 2003). The factor analysis of interpersonal trust and interactive anxiousness of contemporary college students – Nanchang as the investigative center. *Jiangxi Normal University (Social Sciences)*, 36(4), 87–92.

Zhang, X.-H., Jin, J., Ngorsuraches, S., & Li, S.-C. (2009). Development and validation of a scale to measure patients' trust in pharmacists in Singapore. *Patient Preference and Adherence*, 3, 1–7.

Zheng, Y.F. (2006). *Trust Theory* [M]. China Radio Film & TV Press.

Zhixian, Z. (2012). Scholarship of teaching in open universities: Connotations, significance and methods [J]. *Distance Education in China*, 9.